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HISTORY
OF THE
BERWICKSHIRE
NATURALISTS' CLUB.

INSTITUTED SEPTEMBER 23, 1831.

"MARE ET TELLUS, ET, QUOD TEGIT OMNIA, CÆLUM."

1876—1878.



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PROCEEDINGS
OF THE
BERWICKSHIRE NATURALISTS' CLUB.

*Address delivered to the Berwickshire Naturalists' Club, at
Dunse, September 28th, 1876. By ARCHIBALD CAMP-
BELL SWINTON, Esq., LL.D., F.R.S.E., of Kimmerghame,
President.*

GENTLEMEN,

THE salutary rule of our Club which prohibits after dinner speeches, prevented me from expressing at the Anniversary Meeting at Alnwick, my grateful sense of the high honour conferred on me by being elected your President. The distinction was not the less appreciated because it was felt to be undeserved. Nor has my limited acquaintance with the subjects to which the Club devotes its attention diminished my enjoyment of the Meetings, which I have attended during my term of office. Of these Meetings I proceed according to custom to give a short account, for the materials of which I am mainly indebted to the kindness of our learned and zealous Secretary, Mr Hardy; though I must also express my obligations to the reports in the local newspapers, in some of which it is not difficult to trace the practised hand of one of our members.

The Anniversary Meeting at Alnwick, on Wednesday, the 29th of September, was attended by upwards of sixty gentlemen, including the following members of the Club, and their friends :—the Rev. J. F. Bigge, Stamfordham, President ; Dr F. Douglas and Mr James Hardy, Secretaries ; Mr R. Middlemas, Treasurer ; F. J. W. Collingwood, of Glanton Pyke ; D. Milne Home, of Wedderburn ; Captain Milne Home, M.P. ; A. Campbell Swinton, of Kimmerghame ; John Halliday, Wedderburn Castle ; George Greig, Harvieston ; Col. Aytoun, Edinburgh ; Major Holland, Alnwick ; Captain Forbes, R.N., Berwick ; Captain Gandy, Alnwick ; Revs. J. C. Bruce, LL.D., Newcastle ; E. B. Trotter, Alnwick ; G. Selby Thomson, Acklington ; P. G. McDouall, Kirknewton ; Edward L. Marrett, Lesbury ; J. E. Elliot, Whalton ; E. Rutter, Spittal ; Hill Scott, Kelso ; A. Bisset, Fouliden ; W. S. Chedburn, Berwick ; Drs Charles Douglas, Kelso ; Charles Stuart, Chirnside ; C. Brown, Berwick ; R. Wilson, Alnwick ; B. T. Heuston, Dunse ; Messrs W. B. Boyd, Ormiston House ; J. Scott-Dudgeon, Longnewton ; W. Currie, Linthill ; C. M. Wilson, Hawick ; C. Watson, Dunse ; G. Paulin, Berwick ; W. and R. Weatherhead, Berwick ; R. Dand, Hauxley Hall ; John Clay, Berwick ; G. Muirhead, Paxton ; S. H. Smith, Norham ; Adam Robertson, Alnwick ; Alexander Buchan, Secretary to the Meteorological Society of Scotland ; John Short, Newcastle ; Charles Patterson, Coldingham ; W. Elliot, Whalton ; John Bolam, Alnwick ; J. Heatley, Alnwick ; Henry Hunter, Alnwick ; H. H. Blair, Alnwick ; Edward Allen, Alnwick ; J. B. Kerr, Kelso ; Thomas Tate, Alnwick ; John Tate, Barnhill.

The place of meeting possessed a peculiar interest, as being associated with the life and labours of the late Mr George Tate, who was for many years Secretary to the Club, and whose learned and interesting work, entitled "The History of the Borough, Castle, and Barony of Alnwick," has left nothing for a subsequent annalist to record, regarding either the antiquities of the town, or the geology, botany, and zoology of the surrounding district. To many of our members

the visit to Alnwick was specially interesting on another account. They had an agreeable recollection of the Meeting held there on the 29th of August, 1861, when this Club had the pleasure of meeting with the Tyneside Naturalists' Club, and inspected with them the extensive restorations of the noble Castle of the Percies, with the splendid internal decorations then in process of construction. And they had now an opportunity of admiring, in its finished state, a work which, it is hoped, will be an enduring monument of the taste and munificence of two Dukes of Northumberland.

After breakfast, the business of the Club was transacted, new members elected, and the places of meeting for the following year appointed. The party then visited the beautiful and very extensive gardens and greenhouses of the Castle, which, though the colours were on the wane, excited much admiration. Most of the members afterwards drove through the well stocked Deer Park to Hulne Abbey. Pretty glimpses of sylvan scenery opened out, as the track wound up the valley of the Aln. The foliage was slightly tinged with an autumnal hue, but it was easy to imagine what it must have been in its summer pride. The park comprises a considerable variety of height and hollow, dark ravine, smooth lawn, rough pasture, and heathy slope dappled with orange brackens, and tufted with feathery birches and clusters of sombre Scotch firs, with some very fine well-grown native alders in the marshes. Brislaw hill gives an upland character to its higher section, and connects it with purple moors behind. At Hulne Abbey an unusually large service tree was particularly observed—for the service is frequently little more than a bush. The height of this specimen was not ascertained, but the trunk measured in girth 6 feet 3 inches. On the return drive, the party did not fail to admire the stately silver firs, which are mentioned, and accurate measurements of nine of them given, in the Presidential Address, delivered at Alnmouth, in 1857, by the late Mr Dickson, of Whitecross. That address contains also a description of the next attraction, the Church of St. Paul, with its noble

stained-glass window, erected in memory of Hugh, Duke of Northumberland, from a design by the late William Dyce, R.A. St. Michael's Church was also visited, the interior of which has recently undergone, at the expense of the present Duke, extensive and elaborate alterations. The wood carvings on the screen, and stalls in the chancel, are highly creditable to the skill and genius of a native artist. The site of this church, commanding an extensive view of the surrounding country, the top of the tower was used in old times as a Border beacon. The mason marks of the original Norman structure are still visible on the south side, the tower having protected them from the weather. In the afternoon the Castle was opened to the members, who passed through the various apartments, the magnificent decorations of which have already been referred to. The day was unfortunately too gloomy to admit of full enjoyment of the precious works of art contained in many of the rooms. The spacious kitchen came in for its share of admiration. But to many of the members the chief attraction was the Museum of Roman, Mediæval and British Antiquities; and Dr Bruce who had attended expressly to explain its contents, had a most attentive audience.

Forty-eight assembled at dinner. The President delivered a very interesting address, and concluded by nominating me as his successor. The following points were under consideration:—1st, The expediency of lithographing the remarkable trees of the district; 2nd, that notices regarding the migration of birds should be collected; 3rd, that local history and antiquities might be more systematically cultivated; and 4th, that greater attention should be paid to meteorology. The following are the members who were nominated and elected at this meeting:—Lieut.-Col. Andrew Aytoun, R.A.; Benjamin Tydd Heuston, L.R.C.P., Dunse; Capt. Theodore Williams, Etal House; Rev. Mandell Creighton, Vicarage, Embleton, Chathill; W. Richardson, Alnwick; Dr McDouall, County Asylum, Morpeth; Rev. Mr Wright, Vicar of North Gosforth; John Forster Baird, Woodlands, Teddington,

Middlesex; John Halliday, Wedderburn Castle, Dunse; Rev. J. Hill Scott, Kelso; George Greig, Harvieston, Stonehaven; Alexander Buchan, Secretary to the Meteorological Society, Edinburgh; William Kinneir, Radcliffe Colliery, Acklington.

The places of meeting for the year 1876 were fixed as follows:—Selkirk, in May; Innerwick or Dunbar, in June; Norham and Horncliffe, in July; Rothbury, in August; and Dunse, in September. On subsequent consideration, Selkirk and Dunbar changed places.

Accordingly the first meeting in 1876 was held at Dunbar, on Wednesday, the 17th of May. I greatly regretted that an unavoidable engagement prevented my attendance. There were twenty-three present. The day was most favourable for a walk along the East Lothian sea coast—clear and sunny, the wind raising only a slight ripple on the waves. The company comprised the two secretaries, Dr Francis Douglas and Mr James Hardy; Sir Walter Elliot; Revs. J. F. Bigge (Stamfordham), William Darnell (Bamburgh), J. E. Elliot (Whalton), Hill Scott (Kelso), E. A. Wilkinson (Tudhoe, Durham), W. Stobbs (Gordon), W. Sprott (North Berwick); Lieut.-Colonel Aytoun; Captain Forbes, R.N., Berwick; Captain Norman, R.N., North Berwick; Drs Charles Stuart, Charles Douglas, J. Robson Scott; Messrs Thomas Allan (Horncliffe), J. B. Boyd (Cherrytrees), George Muirhead (Paxton), Edward Allen (Alnwick), W. Shaw (Eymouth), Charles Watson (Dunse). In the absence of the president, the Rev. J. F. Bigge officiated as chairman. Mr James Knox, bookseller, Dunbar, kindly acted as guide throughout the day. After viewing the interior of the Town Hall, which consists of a succession of vacant uninviting rooms, and being shewn the presses and chests containing the town's documents, said to be extensive and curious, the route was taken for the old Castle, which occupies a commanding situation, but is now a shapeless ruin, the new harbour having cut off a considerable portion of it at the eastern end. It commands an extensive view; the white cliffs of the Bass were the most conspicuous object in the distance,

owing to a haze on the horizon ; but the immediate shores were distinct, and the little rocks that roughen and render dangerous the entrance to the harbour, were pretty pictures, although bare and barren. The rocks here are of ancient volcanic origin—trap and trap-tufa, red coloured, with grey patches. The hue may be owing to their having acquired the colouring of the red sandstone, which they have here ruptured. Near the harbour this iron-shot trap is pillared. *Cochlearia danica*, along with the common scurvy grass, grows on the Castle ruins. Several solan geese were skimming across the waters, and a flock of about ten redshanks dashed round the pier, shewing that they had not all as yet left these rocky shores for their summer home by the Highland lakes. A few curlews were the only other shore birds specially noted. East of the town the old red sandstone is set up on its edges, and at one place is intermingled with the trap ; further along the links the calciferous sandstone overlies it, and then the mountain limestone crops out. Still further east, on East Barns shore, a curious discovery, not yet published, was lately made by some of the staff of the Ordnance Survey, in finding a supposed new species of *Productus*, a fossil shell, prevalent in mountain limestone, having used its long spines as a means of attachment to Encrinal stems (corals which form a notable component of that limestone). The *Producti* are very minute, and cling closely round the stem of the Encrinite, looking like a very small long-rayed star-fish. On an eminence beyond Broxmouth Park, an extensive prospect eastward was obtained, terminating with St. Abb's Head. Broxmouth grounds were next entered. The parks were regaining their spring verdure, along with a sprinkling of daisies and buttercups of the bulbous species ; and a bright radiance played round the tree tops already crowned with foliage. Some of the memorials of the second battle of Dunbar, September 3, 1650, were here pointed out. Here is "Cromwell's Mount ;" on the sea coast below tide-mark is "Cromwell's Well ;" and from the windows on the north-west of the mansion house the Protector

anxiously scanned the movements of the Scottish army, or brooded over the forlorn condition of his own hemmed-in and ill-provisioned troops. Here, among the shrubbery, is the grave-stone—a slab—of Sir William Douglas, of Kirkness, who fell on the Covenanting side, along with the two Homes of Wedderburn (father and son), who, however, were buried in the Collegiate Church of Dunglass. There are some good trees in the park, and some old yews round “The Mount.” *Tortula levipila* was the only rarity picked up. The extensive gardens, green-houses, and forcing-houses were examined. The gardens are rather chilled by proximity to the sea, and by the too frequent ingress of the north-east wind. A species of *Doronicum* grows extensively, half wild, near the lodge at the exit to the public road, and was then in flower.

Dunbar Church, and the monument to George Home, of Manderston, Lord High Treasurer of Scotland under James VI., were the next objects of attention. The monument is evidently a foreign production. No native artist at that period could have wrought so skilfully in marble. It is disfigured by the pulpit being placed in front of it. In the churchyard are some interesting tombs, one to a Ramsay of Edington, a scion of the Dalhousie family. With some pains the inscription might be legible. Mr Ritchie, the highly respected town clerk, kindly invited the Club to inspect some antiquities of which he is the fortunate possessor. These are (1) the shield of Prince Charles Edward Stuart, which he cast away on the fatal field of Culloden; (2) a black letter copy of Holinshed’s History, with wood-cuts, in wooden boards; (3) some MSS. of Burns in the poet’s own handwriting, particularly the song of “Bonnie Jean,” “The Election,” and a letter to Captain Riddell, with his signature. The first and most important of these relics recalls to memory the “*Relicta non bene Parmula*,” to which Horace (Book ii., Ode 7) playfully alludes, in token of the exercise on his own part of the discretion which is the better part of valour. Its history has been scarcely less adventurous than that of its unfortunate owner; as will be seen from the following letter

to Mr Ritchie, dated New Plymouth, New Zealand, September, 1869. The writer was Mrs Helen A. Wilson, the widow of Dr Peter Wilson, who was a cousin of Mrs Ritchie's, settled in New Zealand since 1841.

Mr Gilmore, who is referred to as the bearer to this country of the letter and the shield, is a merchant in the same colony :—

“The following is the way in which the Shield or Target, which I now send to your care, was placed in my father's hands and safe keeping. Secretary Murray, observing where the unfortunate Prince had thrown this Shield, when he was obliged to leave the field of Culloden, on the 16th April, 1746, returned at night, brought it away, and placed it in the keeping of Mrs Skinner, wife of General Skinner, at that time chief engineer of all Scotland, in whose possession it remained until 1786, when that lady gave it to my father, James Simpson, a well-known enthusiastic admirer of the Prince. Since my father's death, it has been carefully preserved by me. The settlement of some family affairs, caused Mrs Skinner, at a very advanced age, to go to Gibraltar. As she was staying at my father's, she was not long in finding out how sincerely he was attached to the House of Stuart, and therefore considered him the right person, in whose charge to trust the relic. I have often heard him describe the way in which she gave it to him. A few days before her departure for England, she requested him to attend her in her bedroom. Seeing the lady was in her 84th year, there was nothing very improper in the request, with which Mr Simpson complied. When he entered, the door was carefully locked, and the window blinds drawn down. When all these arrangements were completed, the ‘old Jacobite’ unlocked a large trunk, took out all its contents, then tore off the paper lining which usually covers the inside of such useful articles of domestic furniture, and to Mr Simpson's surprise, who began to think her insane, she removed a *false bottom* and brought to light the above mentioned Shield, after having been concealed in the old Dame's trunk for forty-one years. It remained under my father's eye for thirty-four years. Since 1820, I have watched over the relic, but not with the care I ought to have had for it. I was wrong in the first place in allowing it to be brought to this

country, where it has had more than one narrow escape. If Mr Gilmore is blessed with a safe voyage, the poor 'Shield' is at last sure of a quiet home after all its wanderings. An account of its adventures would be as full of interest, and much more so, than the far-famed 'Adventures of a Guinea' or even those of Gil Blas."

Mr Ritchie's premises, in which this precious relic has thus found "a quiet home," are occupied also as the Commercial Bank. They formerly belonged to the Sir William Douglas, who fell at Broxmouth. The site of St. Bey's, or St. Anne's Chapel, was on the shore behind. A curious old dial of date 1649, with the inscription, "WATCH FOR YE KNO NOT THE HOWRE," was found on this site called "St. Anne's Court," and removed to the garden, in 1871.

After dinner, so far as the limited time permitted, the following papers were read:—1. Memoir of Captain James Forsyth, M.A., Bengal Staff Corps, Assistant Commissioner, 1st Class, Central Provinces, author of the "Highlands of Central India," "The Sporting Rifle and its Projectiles," &c., by his father, the Rev. James Forsyth, D.D., Aberdeen. 2. Notices of W. P. Turnbull, LL.D., author of "The Birds of East Lothian;" and of Captain Laskey, the Conchologist, by Robert Gray, F.R.S.E. 3. The Ornithology of the Dunbar Coast, by Mr Gray. This was a paper of great interest, the coast being rich in birds. 4. Sir Walter Elliot addressed the Club on the ravages of the field vole (*Arvicola agrestis*) in the Borthwick water district, and read a number of communications on the subject, which will be embodied in a paper in our Proceedings. A number of stone implements from the east of Berwickshire and Northumberland were handed round. One of a broad wedge shape, of unknown stone, the Rev. J. F. Bigge had obtained from Gunnerton Crags, Tynedale.

The following additions to the membership were proposed: Mr Edward Ridley, 10, Carlton House Terrace, London; Rev. G. P. Wilkinson, Harperley Park, Darlington; Mr Geo. Short, Stanhope Cottage, Norfolk Road, London; Rev. W.

W. Tulloch, Kelso ; Captain W. Elliot Lockhart, younger, of Borthwickbrae, Hawick ; Sir Edward Blackett, Bart., Matfen, Newcastle ; Rev. William Sprott, North Berwick ; Captain Neil Kennedy, 2, Manor Place, Edinburgh.

The second meeting of the year was held at Selkirk, on Wednesday, the 28th of June : present—A. Campbell Swinton, of Kimmerghame, President ; Mr J. Hardy, Oldcambus, Secretary ; Sheriff Russell ; Dr Anderson, Provost of Selkirk ; Drs. C. Douglas, Kelso ; Robson Scott, Belford ; Grier-son, Melrose ; Dewar, Melrose ; Professor Leishman, Glasgow University ; Revs. Dr Leishman, Linton ; Dr Gloag, Galashiels ; A. Davidson, Yetholm ; A. I. Ritchie, Whitekirk ; W. Sprott, North Berwick ; J. Farquharson, Selkirk ; P. McKerron, Kelso ; Patterson, Ancrum ; M. H. Graham, Maxton ; G. S. Thomson, Acklington ; J. S. Green, Wooler ; P. G. McDouall, Kirknewton ; Captain Forbes, R.N., Berwick ; Captain Macpherson, Melrose ; Messrs W. B. Boyd, Ormiston ; J. S. Dudgeon, Longnewton ; John Clay, Berwick ; G. P. Hughes, Middleton Hall ; S. H. Smith, Norham ; James Dipnall, Overbury Hall, Suffolk ; A. H. Borthwick, Melrose ; J. Hornsby, Lancashire ; David Watson, Hawick ; C. M. Wilson, Hawick ; James Brown, Selkirk ; George Rodger, Selkirk ; M. H. Dand, Hauxley Hall ; A. Brotherston, Kelso ; J. B. Kerr, Kelso ; J. Smail, Galashiels ; W. Brown, Galashiels ; A. H. Evans, Scremerston ; W. Currie, Linthill ; J. Wood, Galashiels ; James Tait, Kelso ; John Freer, Melrose. After breakfast at the County Hotel, the party divided into two detachments, the botanists taking their way up the Ettrick and Yarrow towards Bowhill, while most of the members drove to Philiphaugh, the residence of Sir John Murray, Bart. ; near to which was fought the battle in which General Leslie, who commanded the Covenanters, defeated the Royalists under Montrose. On the way to the house, a pyramid was passed, overgrown with ivy, on which is the following inscription :—" Erected by Sir John Murray, Bart., to the memory of the Covenanters, who fought and gained the

battle of Philiphaugh, on the 13th September, 1645." The house is beautifully situated, overlooking the vale of the Yarrow, and finely sheltered behind by wooded hills. It contains among other relics of the olden time, some ancient weapons, and a bottle of wine, one of twelve dug up on the site of the battle. In the staircase is a portrait of General Leslie, who has by no means a prepossessing look, and near it a portrait of his antagonist, Montrose. While the party were in the house and grounds of Philiphaugh, attention was called to the fact, that the family now represented by Sir John Murray is one of the oldest in Scotland, and has formed alliances with many illustrious houses. Some members of the Club had visited, in the morning, the remains of the old kirk at Selkirk, some walls of which only remain; and in one part of it is the burial place of Philiphaugh. One stone is erected "in memory of Archibald de Moravia and his wife, a daughter of Sir David Olifard, A.D. 1280." Then follow "Roger de Moravia of Falahill, and his wife, 1321; John de Moravia of Falahill, and Cranstoun Riddal, his wife, A.D. 1356." The next is Alexander de Moravia of Falahill, and his wife, 1380; then Patrick de Moravia of Falahill, and his wife, A.D. 1395; John de Moravia of Falahill and Philiphaugh, &c., and his wife, A.D. 1461; Patrick de Moravia of Falahill and Philiphaugh, and his wife, A.D. 1492; also, John de Moravia of Falahill and Philiphaugh, &c., and his wife, Lady Margaret Hepburn, daughter of Patrick, Earl of Bothwell, A.D. 1510. This last was commonly called "The Outlaw," and seems to have possessed a great extent of territory, including Falahill, whence he could command the passes from Edinburgh to Ettrick Forest, and live in regal state at Newark Castle, while the King in Edinburgh knew little of what his powerful subject was doing. To the Outlaw Murray pertained much of the territory afterwards acquired by the Duke of Buccleuch, including Bowhill, which was possessed by a Murray so late as the beginning of last century; for on a smaller stone is the name of Sir John

Murray of Bowhill, knight, who, we are told, represented the county of Selkirk, from 1703 till 1707, and was elected one of the representatives to the first Parliament of Great Britain, in 1709. The Outlaw is said to have been of prodigious size and strength, and to have had five hundred retainers. King James IV. was so much impressed with his courage and noble bearing, that he granted him a free pardon, and made him hereditary Sheriff of the Forest.

Crossing the Yarrow, the party entered the grounds of Bowhill, where by the courtesy of his Grace the Duke of Buccleuch, ample provision had been made for their viewing everything to advantage. The house seems the perfection of comfort, and contains numerous fine pictures, including family and other portraits. Conspicuous among these is a full length of James, Duke of Monmouth, by Kneller, and in the dining room is Anne, Duchess of Monmouth. Here too, most appropriately, hangs the well-known picture by Raeburn, of Sir Walter (then Mr) Scott, seated with the faithful Camp at his feet; Hermitage Castle and the mountains of Liddisdale in the back ground. Some splendid tapestry at the head of the staircase attracted particular attention. After visiting the gardens and pleasure grounds—the latter radiant with Rhododendrons, the members of the Club now united into one body,

“ —passed where Newark’s stately tower
Looks out from Yarrow’s birchen bower.”

It is here that Anne, Duchess of Buccleuch and Monmouth is described as listening to the “Lay of the last Minstrel.” The castle is situated on an eminence overhanging the river, just at the entrance to the valley which extends upwards to St. Mary’s Loch. Opposite to it, is Foulshiels, the birth place of Mungo Park, whose signature in his own handwriting is still visible on one of the internal walls of the castle. Newark occupies a position of great strength, and the walls are of remarkable thickness. It is now a square and roofless tower, with a stair of 104 steps leading to its top, most of the windows bearing traces of modern repairs.

Even the door is modern in shape, though the stones forming the lintels are old. In the south-west wall is a stone bearing the royal arms of Scotland, which may have been placed there when the Outlaw Murray was Sheriff of the County. Outside the gate is a huge ash with thick and widely extended limbs, which was known as "the Hanging Tree."

The return road was by "the Duchess' Walk," embracing some of the finest scenery on the river. The path winds among shady woods by the side of the rolling stream, which, at intervals, frets itself among ledges of rocks, and elsewhere flows past receding banks, affording space for those flats and depressions which are so renowned as the "houms of Yarrow." The famous "Birks" were only seen far off in the ravines of Newark hill. Many rare wild blossoms adorned the woodlands, but the "apples" that "hang from the rock" are assuredly myths.*

Forty-four assembled at dinner. The oldest volume of the Burgh records was produced for inspection. Mr Wood had brought a curious ecclesiastical seal of brass found near Fairnalee; but the inscription was obliterated. Mr James Brown, manufacturer, exhibited a flag, said to have been taken at Flodden by a member of the Corporation of Weavers; by whose successive deacons it has been preserved, and exhibited annually at the ceremony called "Riding the Marches." Originally of green silk, it was described by Robert Chambers, more than 40 years ago, as having once borne traces of an eagle and serpent as armorial bearings. As seen by the Club it had been repaired, by pasting the fragments on white cotton cloth. But it bore, instead of the figures mentioned by Chambers, what appeared to be two shuttles crossing one another. This suggested to some of the

* "Fair hangs the apple frae the rock;
Sweet the wave of Yarrow flowin'."

HAMILTON, of Bangour.

"Fair hangs the apple frae the rock,
But we will leave it growing."

WORDSWORTH

party the profane idea that it had simply been the flag of the weavers, and not a trophy taken from the English foe. Others held that the shuttles had been added after the pennant came into the possession of the craft. Another, at least, equally authentic relic of Flodden's field, was seen by some of our members, in the possession of Mr Brydon, formerly tenant of Mount Benger, in Yarrow, and now living in comfortable retirement at Selkirk. It was a sword with an Andrea Farrara blade, borne in the fatal fray by the Town Clerk of Selkirk, who was knighted by King James before the battle, and was one of the few survivors among the "Flowers of the Forest."

Captain Elliot Lockhart who had intended to have been present to make some remarks on the field voles, sent a letter of apology, in which he stated that these animals had for the present deserted Howpasley. He further said, that Mr Moffat of Craik had told him, he thought they had been about five years in arriving at the numbers they were in, at the time of the great damage being done by them in the early spring. The Rev. Mr Ritchie of Whitekirk presented some curious extracts from the Parish records of Tynninghame, which, it is hoped, may one day be printed. A biographical notice of Sir Andrew Smith (a native of Kirkton, Roxburghshire), who was Director General of the Medical Department of the British Army, and a distinguished naturalist, was laid before the Club. It is from the pen of his nephew, Bailie Michie of Hawick, and will appear in our Proceedings. A permanent place will also be found there for some valuable notes on the Flora of Selkirkshire, which were in part read to the meeting by the Rev. Mr Farquharson. In connection with this subject, the following may be stated as the result of this day's explorations by the botanical section of our body:—

In going up the Ettrick to Philiphaugh, a number of plants were found, including *Lepidium Smithii*, *Teesdalia nudicaulis*, *Hypericum dubium*, *Myriophyllum alterniflorum*, *Hieracium collinum*, *Symphytum tuberosum*, *Lysimachia nummularia*, *Carex remota*, and many interesting

Salices, including *decipiens*, and several forms of *phylicifolia*. At Philiphaugh, in addition to some of the above mentioned, *Orobus tenuifolius* was picked up.

On the way to and at Bowhill and Newark, the following were observed:—The Adder's Tongue Fern, *Symphytum officinale*, *Myosotis sylvatica*, *Poa nemoralis*, *Pulmonaria officinalis*, *Doronicum Pardalianches*, *Ranunculus auricomus*, *Carduus Heterophyllus*, *Viburnum Opulus*, *Geum intermedium*, *Hieracium crocatum*, *Viola amœna*, and *Plantago media* (which is unrecorded in this district, though here it was in abundance.) In an artificial pond, *Ranunculus trichophyllus*, and, on the edge, the orange hawkweed (*Hieracium aurantiacum*) were noticed.

On the day before (Tuesday) several botanists were out in the locality, walking from Galashiels over by Caddonfoot and Yair. Between Caddonfoot and Yair, *Orchis incarnata* and *Carex Watsoni* were found. After viewing the famous vineries at Clovenfords, the walk was continued, and amongst other plants *Hieracium crocatum* was picked up (on rocks in the Caddon), also *Corydalis claviculata*, and *Melica uniflora*. Plenty of Wall Rue was seen on the old walls passed, and afterwards on Selkirk Bridge. *Peplis portula* was noticed in a ditch by the road-side. On Yair Hill a beautiful view was obtained of the vale of Yarrow, extending as far as St. Mary's Loch. Numbers of moths and butterflies were captured, and *Valeriana Pyreniaca* was observed.

The following gentlemen were proposed for membership—Dr Anderson, Selkirk; Mr James Brown, Selkirk; Mr Geo. Rodger, Selkirk; Rev. Baptiste J. Holmes, Berwick; Dr John L. Crombie, North Berwick; Rev. Paton Gloag, D.D., Galashiels; Mr Andrew Currie, Darnick.

I do not know whether it was otherwise than by accident, that after our visit to the spot associated, as has been said, with the "Lay of the last Minstrel," the next meeting of the Club was held at the scene of the opening canto of Marmion. Beneath the shadow of "Norham's castled steep," on the banks of "Tweed's fair river broad and deep," there assembled,

on Wednesday, the 26th of July, about fifty members, including A. Campbell Swinton, of Kimmerghame, President; Dr F. Douglas and Mr J. Hardy, Secretaries; Sheriff Russell; Robert Crossman, of Cheswick House; Revs. J. F. Bigge, Stamfordham; P. G. McDouall, Kirknewton; J. E. Elliot, Whalton; W. Darnell, Bamburgh; W. L. J. Cooley, Rennington; Hastings M. Neville, Ford; B. S. Wilson, Duddo; S. A. Fyler, Cornhill; J. Henderson, Ancroft; Robert Paul, Coldstream; W. Dobie, Ladykirk; Jos. Hunter, Cockburnspath; A. Bisset, Foulden; D. Millar, Mordington; James Oliver, Berwick; H. M. Graham, Maxton; David Paul, Roxburgh; P. McKerron, Kelso; Captain Forbes, R.N., Berwick; Drs Paxton, Norham; Robertson, Otterburn; Colville Brown, Berwick; H. Richardson, R.N., Berrington House; Pringle Hughes, Middleton Hall; Messrs T. Arkle, Highlaws, Morpeth; Thomas Allan, Horncliffe House; Geo. Young, Berwick; William Currie, Linthill; John Clay, Berwick; James Nicholson, Murton; Robert Bolam and George Bolam, Weetwood Hall; J. B. Kerr, Kelso; A. Brotherston, Kelso; J. Hastie, London; — Tatham, London; P. W. T. Warren, Berwick; — Ryley, Berwick; S. H. Smith, Norham; Robert Paton, Norham; J. Thomson, Kelso; Geo. Muirhead, Paxton; M. G. Crossman, Berwick.

Norham had been four times previously visited by the Club—viz., in September, 1837; May, 1846; September, 1858; and May, 1865; under the respective Presidencies of Dr Clark, Mr Embleton, Mr Langlands, and Mr Collingwood. One of these gentlemen, Mr Langlands, embodied in his address a short historical sketch of the castle, and also some notices of the church. The latter is more fully described in a paper with which the late Rev. Dr Gilly—long the highly esteemed vicar of the parish—enriched the second volume of our Proceedings, and also in Mr Fred. R. Wilson's work on "The Churches of Lindisfarne."* When to these is added the ample space devoted to Norhamshire, in Raine's "History

* "An Architectural Survey of the Churches in the Archdeaconry of Lindisfarne, in the County of Northumberland, by Frederick Richard Wilson, Architect."—*Newcastle-upon-Tyne*, 1870.

of North Durham," it must be evident that it would be unpardonable to occupy time with what has been so well done by others.

In the church, which was first inspected, the only important additions since the Club's last visit, are two memorial windows in the chancel. One of these was erected by Mrs Jerningham to her former husband, Mr Mather of Longridge. The other is a tribute by Lady Marjoribanks of Ladykirk, to the memory of the noble Lord, whose death, within a few days of his elevation to the Peerage, created so painful a sensation in the County of Berwick, of which he was the Lord Lieutenant and Parliamentary representative.

Within an inclosure in the church yard are some sculptured stones, which formed part of the older fabric. These are described by Mr Langlands in his Address (vol iv. of our Proceedings, p. 121), and lithographic sketches of them are contained in a subsequent part of the same volume. They are also noticed by our distinguished colleague, Dr John Stuart, in his magnificent work on the "Sculptured Stones of Scotland," (vol. ii., p. 20). And as the book is not generally accessible, I may be permitted to transcribe what he says regarding them. After stating that the church was founded by Egfrid or Egred, Bishop of Lindisfarne, from 830 to 845, who dedicated it to St. Peter, St. Cuthbert, and St. Ceolwulf, and that hither the bones of the last, who renounced the throne of Northumberland and became a Monk, were removed from Lindisfarne, Dr Stuart goes on—

"Of the original church of Egred, or rather of its ornaments, there have been discovered at different periods in the church yard and adjacent grounds, some interesting remains. The greater part of these were found in 1833, in investigating the foundations of a building in the church yard, a few paces from the east end of the present fabric. They are now arranged in a sort of pyramid in the church yard, and the greater part of them seem to be fragments of broken crosses. They are of the same style of art as the fragments at Lindisfarne, and must be referred to Saxon times. In Dr Raine's

opinion (p. 261) they are of the same date as the cross at Bewcastle." Dr Stuart continues, quoting from Raine's "North Durham" (p. 259), "In addition to these valuable specimens of ancient art, Mr Lambe, a late vicar of Norham, discovered in his day among the same rudera at the east end of the church, a fragment of a stone (now lost), but belonging to the same period, on which, as he says, were cut the effigies of the three patrons of Norham church, St. Peter with the keys, St. Cuthbert, and St. Ceolwulf with a sceptre in his hand; each of these saints hath his head covered with a monk's cowl or hood (Flodden Field), p. 149, ed. 1809." "Mr Lambe," Dr Raine goes on to say, "must have been a fanciful antiquary. Hutchinson (Northumberland, ii., 25) gives a drawing of this stone, which completely disproves his statement. There are six heads in all, and the upper (Lambe's St. Peter with his keys) appears to be the Virgin with braided hair. The two below, instead of being clad in cowls, are each under a deep nimbus, and the inscription, IHS NAZARAIOS, which Hutchinson has incorrectly copied and was unable to decipher, still more clearly proves the mistake into which Mr Lambe has fallen." Of sixteen of these stones engraved for Dr Stuart's work, two only contain figures of human heads, and other two of animals.

In visiting the vicarage, great regret was felt at the absence on a continental tour of the accomplished vicar, who is one of our members. In the grounds are a wide-spreading walnut tree, and a *Wellingtonia gigantea* of remarkable size and symmetry. At Rosebank, the residence of the Misses Dickinson, much pleasure was derived from an inspection of the extensive collection of paintings of wild flowers, beautifully executed by Miss Margaret R. Dickinson, one of our honorary members. The same accomplished lady, having been at Holy Island two days previously, had discovered on the Ragwort caterpillars of the Cinnabar Moth (*Callimorpha Jacobæa*), and had painted a specimen of them.

The route was next taken to the castle, where extensive repairs are in course of execution by the proprietor, Mr

Jerningham, with a laudable anxiety to arrest the progress of decay, without impairing the venerable appearance of the fabric. Round the base of the ruin were growing the gay Viper's Bugloss, the *Plantago media*, and the Scots Thistle. At the door of the keeper's house were several balls both of iron and stone, said to have been fired from cannon in the days of old. One of the stone balls, measuring about 18 inches in diameter, and asserted to have been discharged from the celebrated Mons Meg, was conjectured by a sceptical member of the party, to have formed, at no distant date, the topstone of a gate pillar. The "Monk's Well," at the foot of the rock on which the castle stands, afforded a refreshing drink of water. Further down the river, on the Scotch side, is another sacred spring called Holywell, which gives its name to an adjacent fishing shield. The walk along the banks of the stream was most enjoyable. The rocks are of Tuedian sandstone, of which there is an extensive quarry a little below the castle. Fine examples of false bedding occur among the seams occasioned during deposition by cross currents. These were, by not a few of the party, mistaken for real strata. Great profusion of the Common Tansy grows on the river banks, and in the river itself were many water plants, amongst which were several forms of *Ranunculus fluitans*; *Potamogetons*, *nitens*, *lucens*, *pectinatus*, and others; *Anacharis Alsinastrum*, &c. Skimming the surface of the water were two black-headed gulls.

Horncliffe Dean, the woodcut representation of which, in Johnston's "Botany of the Eastern Borders," is well known to botanists, was explored by some of the more active of the party. One of them thus describes it:—"The Dean is truly a delightful retreat. A deep and romantic dell is fringed on one side with grass and brakens (*Pteris Aquilina*), and on the steep bank to the right is covered with woody copses and many fine trees. A brook, which reminds one of Tennyson's poem, winds at the bottom of the hollow, laving the fronds of the ferns and the leaves of the luxuriant *Eupatorium cannabinum*, or hemp agrimony, with its pellucid

waters. The mass of vegetation is very rank, and the trees in some places are very much crowded, so much so that in one or two places we noticed young firs, fifteen and sixteen feet in height, standing leafless and bare, having died in the struggle for air and room, while their more fortunate neighbours were pushing a-head. On coming in sight of the old mill the scene was positively charming, so much of nature on every side. On our right is a gravelly scaur, on which is a rich growth of hazel, thorn, sloe, wild roses ; and depending over the face of the precipice were festoons of ivy, flowering honeysuckle, and brambles, the line extending to the old mill, which is picturesquely situated between two tree-topped rocks, suggestive of the happy line in Virgil's *Bucolics*—

‘Hinc altâ sub rupe canet frondator ad auras.’

On the left is a grassy brae, and a rocky precipice, on which is situated a farm steading—a corn stack just peering over the ledge. Above us is a magnificent elm, with beautiful spreading branches, and before us the stream murmurs down the valley, a silver thread in an emerald lawn. Passing the romantic-looking mill, which leaves only about four feet to spare to walk upon, a little cascade meets our view ; and ascending the rock the mill pond lies before us, its banks fringed by a lavish profusion of summer verdure.”

In boats, kindly placed at their disposal by Mr George Young, of Berwick, the members crossed the Tweed, and visited the old church yard at Fishwick. It is somewhat inappropriately planted up, to a considerable extent, with ordinary forest trees, and contains, besides some ancient tombstones, with the usual quaintly-spelt inscriptions, a mortuary chapel erected about the year 1835, as a family burial place, by the late Mr Macbraire, of Broadmeadows. While in the boats, attention was directed to the abundance of *Anacharis Alsinastrum*, which grew in the water. Mr Young informed us that within a few years this plant had increased to a great extent, having advanced up the Tweed at the rate of a mile in a year. When allowed to grow, it

obstructs the fishing, in consequence of which it is cut four times a year. A quantity of silt accumulates wherever the plant becomes established ; and thereby places that once had a firm bottom are rendered treacherous and uncertain. Horses are very fond of it for food, and wade into the water as deep as the neck to feed on the plant.

Returning to England, the party made for Horncliffe House, the beautiful residence of Mr Thomas Allan, by whom they were most hospitably entertained at dinner. The following papers were either read, or received for insertion in the Club's Proceedings :—1. Vindication of Bishop Bek's disposition of Alnwick barony, by the Rev. Canon Procter, Doddington ; 2. On ancient Fishwick, by Mr Hardy ; 3. On Horncliffe, by the same ; 4. On the appearance of large numbers of the Manks Shearwater in the Frith of Forth, and the Ornithology of the Isle of May, by Mr Robert Gray. Some rare plants were exhibited. Mr Edward Allen showed some extraordinary long and densely fibrous rootlets of ash, which had penetrated and choked the water pipes at Alnwick. Mr J. B. Kerr exhibited an interesting collection of plants and other curiosities from Kerguelen's land and Magellan Straits, which had been sent by Dr Alexander Crosbie, of H.M.S. "Challenger." A feature in the collection was the night butterfly caterpillar, the Arveto or Hotote of the Maories of New Zealand. The eggs are deposited in the wood of the hardest trees (iron-wood), and are hatched. The caterpillars on attaining maturity leave the wood, and bury themselves in the earth, previous to changing into the chrysalis state. The specimens were affected by the *Sphaerii Robertsiü*, which grows from the anterior end. The natives eat the caterpillar, which is that of a moth, *Charagria virescens*.

The following new members were proposed :—Mr William Lyall, Librarian of the Literary and Philosophical Society of Newcastle ; William Topley, F.G.S., Government Geological Surveyor of Northumberland, Alnwick ; Hubert E. W. Jerminham, Esq., of Longridge Towers ; Dr Alexander Crosbie,

Botanist of H. B. M. Surveying ship the "Challenger"; Mr Robert Paton, Rosebank, Norham; Rev. Robert O. Bromfield, Sprouston; Mr Alexander Robertson, jun., Berwick; Mr W. L. Miller, banker, Berwick; Rev. William Dobie, Ladykirk; Mr John Clay, jun., Kerchesters, Kelso.

Among the rarer plants observed during the day were:—*Lepidium latifolium*, *Nasturtium palustre* and *sylvestre*, the corn blue bottle (*Centaurea Cyanus*), the hairy variety (*puberula*) of *Silene inflata*, *Carex Watsonii*, *Hieracium murorum*, and *Myosotis palustris*.

The fourth meeting of the Club for the year was at Rothbury, on Tuesday, the 29th of August. It was feared that the difficulty of access, and the threatening state of the weather, would have prevented a large attendance. But there were present at one time or other during the day forty-five members of the Club, and their friends, including A. Campbell Swinton, President; Dr Douglas and Mr Hardy, Secretaries; Rev. Dr Ainger, Rothbury; Sir George Douglas, Bart., M.P.; Sir Walter Elliot; F. W. Collingwood, Glanton Pyke; Drs Wilson, Alnwick; H. Richardson, R.N., Berrington House; J. Paxton, Norham; Revs. W. Greenwell, F.S.A., Durham; W. Darnell, Bamburgh; J. F. Bigge, Stamfordham; G. P. Wilkinson, Harperley Park, Darlington; E. A. Wilkinson, Spennymoor; J. E. Elliot, Whalton; P. G. McDouall, Kirknewton; T. Rogers, Durham; W. H. Walter, Durham; A. Jones, Stannington; Hughes, Rothbury; H. E. Henderson, Eglington; Messrs J. B. Boyd, Cherrytrees; W. B. Boyd, Ormiston; Charles Rea, Doddington; Masters Rea (2); James Tait, Eglington; Thos. Henderson, Middlethird; Thomas Allan, Horncliffe House; E. Allen, Alnwick; Messrs Bosanquet, Rock (3); W. Richardson, Alnwick; T. Arkle, Highlaws, Morpeth; H. F. Shaw, London; Berger, Durham; W. F. Pepper, Leeds; G. B. Douglas, Springwood Park; W. Hindmarsh, Alnwick; S. Donkin, Bywell; T. H. Gibb, Alnwick; W. Topley, F.G.S.; E. Topley.

Of the village, I borrow the following description from

our Secretary's notes :—" Rothbury stands on a narrow strip of cultivable ground, on a slope between the heath-crowned sandstone crags that bound the moors and the Coquet, and this gorge broadens upwards into a wide fertile area, of which we obtained only a glimpse. Harbottle Beacon, a bulky detached black hill, shaped like Ruberslaw, closed the view among the upper reaches of the Coquet. On the opposite side of the Coquet there is an expanse of flat grassy meadow, where the Rothbury races were wont to be held ; and there the ground ascends, reticulated with the hedge-rows and stone walls of cultivated fields, towards the village of Tosson. This ancient tree-shadowed village is backed by a range of low heathy hills, with an undulated ridge line, called the Tosson Hills ; and above all tower the Simonside Hills, broken into several peaks of separate heights with distinctive names, and not, as they appear at a distance, one combined mass, with a continuous mural crown of sandstone crag."

After breakfast at the Queen's Head, the church was inspected. The chief object of interest there is the shaft of the font, which is the lower part of a Saxon cross, sculptured with intertwining knot work, entangling snakes, and a representation of our Saviour's ascension. This fragment has been described and figured in the Club's " Proceedings," and another portion of it in the Transactions of the Antiquarian Society of Newcastle. From their analogy with similar sculptures elsewhere, it was considered that the figures on three of the sides were ornamental, and not symbolical, as was suggested by the late Mr Dickson, in his paper (" History of the Club," vol. iv., p. 7.) The living here is one of the most valuable in Northumberland, and has had several eminent occupants. The present rector is the Rev. G. H. Ainger, D.D., formerly Principal of St. Bees' College. The church was occasionally at the period of the Reformation visited by Bernard Gilpin, the " Apostle of the North," during his missionary peregrinations among the wild men of Coquetdale, Reedsdale, and Tynedale, who thought nothing of settling

some of their quarrels by an appeal to arms within the sacred precincts. Near the church a dilapidated inn, "The Three Half Moons," once the principal hostelry, with black thatched roof, "looking far older than the surrounding hills," remains in a tumble-down state, to evidence the difference between ancient and modern ideas of comfort. In it the Club were entertained on a former visit.

The principal object of the day's expedition was Cragside, the residence of Sir William Armstrong, C.B., the grounds of which had been kindly thrown open for the inspection of the Club. On their way there, along the banks of the Coquet, the party turned aside to view the "Thrum," so called from its being a mere *thread* of water compared with the general breadth of the river. At the foot of a high bank of sandstone rock—its rugged face sprinkled with wild flowers, and trees springing from its ledges—the upper seams have been swept away by the current, so that there remains only a broad pavement of slippery rock, down a gorge of which the water rushes into a long narrow green pool in which there is a constant whirl. The sporting traditions of the neighbourhood tell of a Northumbrian Nimrod, who fearlessly leaped his horse over the chasm, regardless of there being no secure foothold on either side. Previous to this exploit, a boy, making a similar attempt on foot, was drowned, which led to the passage being widened to prevent future accidents.

The house of Cragside, of spacious dimensions and quaint outline, following no particular order of architecture, has been erected on the side of a rocky hill, which its eminent owner has converted at enormous expense into a gigantic *Pinetum*. With the native heather now in full bloom, are intermingled foreign heaths of every variety of shape and colour, while innumerable conifers, of every available species, have been provided with beds of imported soil, on which they grow most luxuriantly. The steep on the west front of the house constitutes one immense rockery, composed of innumerable blocks of stone, with alpins introduced between the inter-

stices ; while lower down, and near the margins, are planted dwarf ornamental shrubs of various kinds. Access is obtained by a series of steps downwards, to the ravine of Debdon Burn, which is spanned by an iron bridge ; whence the path winds up the opposite slope among ornamental pines, sycamores, and other trees, flowering shrubs, onwards to the gardens. The conservatories, with their gay adornments, were examined, as was the excellent arrangement for cultivating ferns in a cavernous winding receptacle hewn out of the rock, and covered with glass, with water trickling across the bottom. The tendency, however, of too much moisture is unduly to lengthen and render some of the hardier sorts filmyleaved and tender. Leaving this centre of attraction, the pathway again led to the burn, which makes its way to the Coquet through a deep and wooded ravine, between steep sandstone side walls ; where, as opposite the Thrum, the birch finds room and sufficient soil to vegetate and spread abroad its limber twigs and light foliage, and the mountain ash to suspend its wreath of coral berries.

The day's visit to this interesting place terminated at the rectory at Whitton Tower, on the southern side of the Coquet. The original rectory had been an old peel tower of the Umfraville family, one of great potency in this district of Northumberland. The Umfraville arms remain in good preservation on a stone on the west side of the structure. The walls of the tower, in some places, are eleven feet in thickness. In the vaulted ground floor is the rector's study, as also a kitchen and cellar. There is a well, containing about eighteen feet of water, in the floor of the cellar. In the survey of Bowes and Ellerker, 1542, Whitton Tower is thus noticed :—" At Whitton, nere unto Rothbury, is a toure and a little barmekin, being the manc'on of the p'sonage of Rothbury, and is in good reparco'ns."

The *Asplenium Ruta-muraria*, or Wall-rue, grows in profusion from the cement on the eastern aspect of Rothbury Bridge, safe from the grasp of the most greedy fern collector.

Thirty-eight dined, the President in the chair ; and Chas.

Rea, Esq., Doddington, officiating as vice-chairman. The Rev. J. F. Bigge informed the meeting that this season his pear tree leaves had suffered greatly, and one of the trees had been killed, by the filthy pear leaf leech-like pest. This is the larva of a black saw fly, and is akin to the caterpillar, so destructive to the foliage of the gooseberry. The pear one protects itself from the heat by a coating of its own excrement. Mr Bigge also laid before the meeting a paper illustrated with cuts and drawings, entitled "A Description of Implements, domestic and agricultural, that have gone, or are fast going, out of use in the county of Northumberland." A letter was read from Mr Thomas Tate, of Alnwick, recording a visit of the Woodlark there during the summer, when it had been heard singing both by day and at night; also a communication from Dr Colville Brown, enclosing a letter from the Rev. Dr Kirke, Hutton, regarding a Spanish fowl, which, at the moulting season, changes its dress from white to black, or contrariwise. A small slate celt from Lauder Moor, furnished by Mr Kelly, was exhibited; and the Rev. G. P. Wilkinson allowed the company to inspect an ancient pectoral cross of hammered gold. It had been originally a plain Calvary cross, and afterwards a representation of our Saviour and the Virgin Mary had been amalgamated with it; the date of the effigy of the Virgin was 1424. It had been picked up by a ploughman near Mr Wilkinson's residence. He also showed a massive gold finger ring, with a representation of the Saviour on the Cross, attended by two angels. This was a *fac-simile* of an ancient ring that had also been found within the county of Durham. Mr Arkle brought tracings of some bronze weapons that had, in 1868, been discovered near Tosson. Mr Greenwell called attention to the condition of one of the towers of Dunstanburgh Castle, which is likely, for want of repair, to crumble to pieces; and the President was empowered to make a representation to the Eyre trustees to induce them to provide a remedy. The non-completion of the wall to protect Edin's Hold on Cockburn Law was also adverted to. Sir Walter Elliot spoke of the propriety

of the Club interfering to protect the localities of rare plants from being rifled. This the Club have always professed to do

The following gentlemen were proposed as members:— Rev. W. H. Walter, Grove House, Gilesgate, Durham; Mr James Hunter, of Antonshill, Coldstream; Mr George Brisbane Douglas, Springwood Park; Rev. John B. Fletcher, Dunse; Mr Thomson Jeffrey, 36, George's Square, Edinburgh; and the Rev. Dr Ainger, Rothbury, Morpeth.

At this meeting, Mr George P. Hughes, of Middleton Hall, and Mr Edward Allen, Alnwick, were nominated to represent the Club at the approaching meeting of the British Association, at Glasgow.

The former of these gentlemen has favoured me with a report of the meeting.

To this imperfect summary of the Proceedings of the Club during the past year, I have very little to add. The year may, I think, be said to have been one of general prosperity throughout the district embraced in our peregrinations. For the pursuits of the botanist and the archæologist, the weather has been specially favourable. During part of the summer the thermometer stood higher than it had done for many years. Even the farmers confess to a tolerably successful harvest. The great event of the season in our Border land was, what I may call the triumphal progress through it of His Royal Highness the Duke of Connaught. That event has an historical interest, as being the first occasion on which a Royal Prince had crossed the Tweed at Berwick, since William, Duke of Cumberland, the victor of Culloden, was entertained there in August, 1771. But its claim to be recorded here is founded on the circumstance, that the Flora of the district was put largely in requisition to attest the loyalty of its inhabitants. On the arrival of the detachment of hussars in Dunse, there was, as His Royal Highness himself expressed it, scarcely a trooper whose buttonhole did not boast a bouquet.

Of the prosperity which I have attributed to the district, our Club has had its full share. I do not know that I have

any suggestions to make, by which that prosperity may be promoted or extended. To the practice recently introduced of inserting in our Proceedings, biographical notices of men of mark connected with the localities which we visit, much interest may, I think, attach, provided the length of such notices is duly limited. A similar caution may perhaps be necessary with regard to the historical and topographical details, which individual members have been invited to furnish in connection with their respective parishes or districts. Of the proposal that our volume might occasionally contain illustrations of remarkable trees, I venture to express my approval by asking the Club to accept, for insertion in this year's Proceedings, engravings of a photograph admirably executed by Mr Bruce, of Dunse, of the finest of three splendid *Araucarias* in the Dunse Castle Garden.

Against one suggestion, made some years ago by one of the most eminent of my predecessors, I must earnestly protest. I allude to the opinion expressed by my friend, Mr Milne Home, in 1861, that "considering the great change which has taken place since the formation of the Club in its objects, and in its sphere of operations, some change should be made in its name." In the first place, I must be permitted to deny that we have wandered very far, at least, from the ground laid out for us by our founders, 45 years ago, when they declared, "that the object of the Club shall be to investigate the Natural History and Antiquities of Berwickshire and its vicinage." But even, were it otherwise, it is not, I submit, the practice of similar associations to change their names as their objects multiply, and their influence extends. The New Club in Edinburgh continues to be so called though it is the oldest establishment of the kind in Scotland. The Bowmen of the Border existed as a social institution long after its members had ceased to practice—if practice they ever did—the sport of archery. Even a mercantile firm does not abandon, on a change of its individual partners, the name under which it has acquired the confidence of the

public. I trust, therefore, that it is no undue jealousy for the fame of my native county, which makes me anxious that we should long retain the title of the "Berwickshire Naturalists' Club." Experience has shewn that our being so designated, in no degree hinders the accession to our ranks of valuable members from the other side of the Tweed. And it is under that name that our labours are known and appreciated by learned universities and kindred societies both in this country and in America, whose interchange of publications with us has led to a wise violation of one of the original rules of the institution, "That the Club shall hold no property."

It has been suggested that the books which the Club acquires in this way might be deposited in the Berwick Museum. And certainly no place could be more appropriate for their custody, than the ancient town which was the birth-place of the Club, and the home of its distinguished founder, Dr Johnston. But if even the Museum is to be available for this purpose, its accommodation, already too limited for its own wants, must be greatly increased.

It is my painful duty to record the death during the past year of one ordinary and one honorary member. The former of these was Mr George Webster, of Hallydown, a Berwickshire landed proprietor, and a highly respected member of the Bar of Scotland. The latter was a lady of whom the Club had reason to be proud, Miss Elizabeth Bell, of Springhill, near Coldstream. She was a valued correspondent of Dr Johnston, and the discoverer of many rare plants on Tweedside. A fine fungus was, by the Rev. M. J. Berkeley, named in her honor, *Agaricus Belliæ*. There is a figure of it in the "Annals of Natural History," vol. vi., plate 10, figures 1-4, and in the "Natural History of the Eastern Borders," plate 10, figure 1. It was found growing from dead stalks of the common reed at the Hirsell.

Again thanking you gentlemen, for the honor of having been elected your President, there remains only the last duty

devolving on me in that capacity—the nomination of my successor. When I name Dr Charles Douglas, of Kelso, a gentleman distinguished alike by his acquirements, and by his high character and genial disposition, I am confident that the proposal will meet with unanimous approval.

NEW MEMBERS ELECTED SEPTEMBER 27TH, 1876.

ORDINARY.

1. Edward Ridley, 10, Carlton House Terrace, London.
2. Rev. George P. Wilkinson, Harperley Park, Darlington.
3. George Short, Stanhope Cottage, Norfolk Road, London.
4. Rev. W. W. Tulloch, B.D., Kelso.
5. Capt. Wm. Elliot Lockhart, younger, of Borthwickbrae, Hawick.
6. Sir Edward Blackett, Bart., Matfen Hall, Newcastle.
7. Rev. William Sprott, North Berwick.
8. Capt. Neil Kennedy, 2, Manor Place, Edinburgh.
9. John L. Crombie, M.D., North Berwick.
10. Rev. Baptiste J. Holmes, St. Mary's Vicarage, Berwick.
11. Rev. Paton J. Gloag, D.D., Galashiels.
12. Henry S. Anderson, M.D., Selkirk.
13. James Brown, Knowepark, Selkirk.
14. George Rodger, Bridgelands, Selkirk.
15. Andrew Currie, Darnick, Melrose.
16. William Lyall, Lit. & Phil. Society, Newcastle.
17. William Topley, F.G.S., Alnwick.
18. Hubert E. H. Jerningham, Longridge Towers, Berwick.
19. Dr Alexander Crosbie, Edinburgh.
20. Robert Paton, Rosebank, Norham.
21. Rev. Robt. O. Bromfield, Sprouston, Kelso.
22. Alexander Robertson, jun., Berwick.
23. W. L. Miller, Union Bank, Berwick.
24. Rev. W. Dobie, Ladykirk, Norham.
25. John Clay, jun., Kerchesters, Kelso.
26. Rev. W. H. Walter, Grove House, Gilesgate, Durham.
27. James Hunter, Anton's Hill, Coldstream,

28. George Brisbane Douglas, Springwood Park, Kelso.
29. Rev. John B. Fletcher, Dunse.
30. Thomson Jeffrey, 36, George Square, Edinburgh.
31. Rev. G. H. Ainger, D.D., Whitton Tower, Rothbury, Morpeth.
32. J. Bailey Langhorne, Oakwood Hall, Wakefield.
33. Sir Molineux Nepean, Bart., Loder's Court, Bridport.
34. Wm. Brook Mortimer, Jesmond Dean, Newcastle.
35. James Robertson, Rock Moor House, Alnwick.
36. Alexander Scott, Hopetoun House, Queen's Ferry.
37. Robert Richardson Dees, Newcastle.
38. John Ferguson, Dunse.
39. Archibald Buchan Hepburn, Smeaton Hepburn, Preston-kirk.

CORRESPONDING.

Robert Renton, Threeburn ford, Lauder.

Memoir of Sir Andrew Smith, M.D., K.C.B., F.R.S., F.Z.S., &c., Director General of the Medical Department of the British Army. By ALEXANDER MICHIE, Vice-President of the Hawick Archæological Society.

xv. 12.

Sir Andrew Smith, K.C.B., formerly Director General of the Medical Department of the Army, was born on the 3rd December, 1797, at Heronhall, in the parish of Kirkton, Roxburghshire. He was the son of Thomas Smith, a man, active and faithful in the discharge of all the duties of life. His mother was a woman of great mental power and Christian worth, and the family consisted of two sons and three daughters, of whom Andrew was the first born.

At an early age, he was sent to a school at Stobs, but made little progress, the teacher, being of a harsh disposition, frequently subjecting him to unmerciful flogging, which produced in his mind an aversion to study. Too frequently he was found playing the part of the truant, spending his time in gathering wild flowers, hunting butterflies, or searching for bird nests.

In 1809, the family having removed to Hassendean, he attended the parish school of Minto, and afterwards that of

Lilliesleaf, where, under more favourable auspices than at Stobs, he made most satisfactory progress with his education.

The medical profession having been chosen as his future sphere of action, he was placed under the care of Mr Walter Graham, of Hawick, a surgeon of extensive practice in the town and surrounding district.

In 1813, he proceeded to Edinburgh, where he pursued, with diligence, ardour, and success, his studies in the University. Being desirous of entering the Medical Department of the Army, and having fully qualified himself for the service, in the summer of 1815, he made application, and repaired to London, to undergo the preliminary examinations; his hopes of a favourable issue, however, being slight, owing to the reduction of the strength of the army, consequent on the return of peace, after the decisive victory of Waterloo. He passed the necessary examinations with credit to himself, and satisfaction to all the members of the Board; a treatise on the eye having especially produced a most favourable impression on the mind of Sir James M'Gregor, the Director General. On the 15th August, he was greatly gratified by being gazetted an Hospital Assistant; and there is good reason to believe, that he was the youngest officer ever admitted to the Department. For three years he did temporary duty at various home stations, and had medical charge of troops going to, or returning from Malta, Nova Scotia, and Canada. In 1818, and following year, he was quartered at Edinburgh, and while there, embraced the opportunity of attending all the classes in the University and Surgeon's Hall, which he had not been able to overtake formerly. At the conclusion; on the 2nd August, 1819, he graduated as M.D. The subject of his inaugural dissertation was "*De Variolis Secundariis.*" During this period he was an occasional contributor to the Edinburgh Medical Journal.

In 1820, Dr Smith was ordered to the Cape of Good Hope, where he remained till 1837. For short periods, he had medical charge there of the 49th and 98th Regiments and Cape Mounted Rifle Corps; and was also frequently employed by successive Governors in confidential missions to the Kaffir and other tribes beyond the frontier. As South Africa has ever presented an attractive field to the naturalist, his leisure hours were spent in the enthusiastic pursuit of his favourite study; and he entered into the work with all the ardour of his nature. In a few years his

collection of objects of natural history contained many valued treasures ; which, on the formation of the museum in connection with the South African Institution, were presented by him for exhibition there. From the first, Dr Smith took great interest in the prosperity of that institution, and, by his exertions, contributed greatly to its success. From time to time the result of his observations on the zoology of the country, embodied in papers, were read at the meetings, and published in the *Quarterly Journal*.

In 1824, Dr Smith was sent by Lord Charles Somerset, the Governor, on a mission into Kaffirland, and while there, in that and the following year, he had much intercourse with Gaika and other chiefs of note. His manly, upright dealings, gained the confidence of the people, and his unceasing efforts, as a medical man, to relieve their sufferings, obtained the love and gratitude of all.

In 1828, owing to the existence of great dissatisfaction on the northern border of the colony, in consequence of the marauding practices of the Bushmen of the Orange river, Dr Smith was commissioned by Sir R. Bourke (who had succeeded Lord Chas. Somerset) to proceed thither to obtain information regarding their views, and ascertain from them, whether the policy of the Government was correctly understood and appreciated. His report recommended several changes, some of which were adopted with good results. One of the fruits of this journey was the publication, at Capetown, of his "*Origin and History of the Bushmen*," which was afterwards translated into the French, German, and other languages.

In consequence of the exterminating wars of Chaka, the Zulu potentate, having depopulated the well-watered and fertile district for a considerable distance around Port Natal, a district more favoured by Nature than any other in South Africa, a strong desire was evinced by the inhabitants of the Cape that it should be opened up for colonization. In 1830 it was decided by Sir Lowry Cole, the new Governor, to send Dr Smith to examine the country, and report the result of his observations. This was a service of no little danger, owing to the ferocious character of Dingaan, the brother and successor of Chaka ; and also to the treacherous and barbarous massacre of Lieut. Farewell, and seven of his party, the previous year, when on their way to Port

Natal, by a chief who had fled from the yoke of Dingaan. Notwithstanding these and other discouraging influences, Dr Smith, accompanied by his friend Lieut. Edie, and a Dutch farmer, set out on the mission. They proceeded on their way till they reached the Umzimvubu, where their passage to the river was stoutly opposed by the inhabitants of an Amaponda kraal situated near its banks. Neither the tact nor persuasive powers of Dr Smith, nor his offer of valuable presents could conciliate the people; so nothing remained for the party but to force its way. All efforts having failed, it was intimated that, at sunrise on the morrow, they would proceed on their journey. Accordingly, all were early astir, making preparations for departure; the Amaponda gathering round and sullenly looking on. At the appointed time when all was ready for the advance, Dr Smith, Lieut. Edie, and the farmer, well mounted and armed, led the way, the wagons followed, while the rear was formed by the servants of the party. The Amaponda, with threats, accompanied them to the river, but the opposite bank was reached in safety. When all were over, Dr Smith intimated that the presents were still available, and sent them to a small island in the middle of the stream. After much hesitation, one man ventured to meet the messengers. The people on recovering the gifts were wild with delight, loudly proclaiming their friendship, and invited the party to return home the same way.

The Umzimvubu was the eastern boundary of the country which had been devastated by Chaka. From this river to the Tugela, a distance of about 240 miles, it had been utterly ravaged; so much so, that not more than fifty persons were seen in the whole territory; except in the immediate vicinity of Port Natal, where a number of natives, the remains of the original inhabitants, having left their hiding places, had gathered for protection around the English traders and hunters, settled there. The party having reached the Tugela, the southern boundary of the Zulu dominion, it became necessary to proceed with the utmost circumspection, as two years had only elapsed since Chaka had been assassinated at the instigation of Dingaan; which deed, had been followed by the slaughter of all, who, in any degree, had been suspected of having disapproved of the policy of the new king. Dr Smith advanced with caution, and was favourably received by the savage monarch at his principal kraal, situated

on the Umslatosi river. While there, many opportunities were afforded of witnessing the galling nature of Dingaan's rule; death being the penalty for many offences, which in less barbarous communities would not have been regarded as crimes. Dr Smith, one morning, saw the lifeless bodies of thirteen women, who had been killed by order of the king, and whose only fault had been, that they had reminded him of a promise made to them, the fulfilment of which they considered had been too long deferred. To impress his visitors with his power, he reviewed several of his favourite regiments, each about a thousand strong, all well drilled, well armed, and active men. To honour them, he had an exhibition of war and other dances, &c. On the other hand, he sought information regarding the white king and his soldiers, the arts and usages of civilized society, and other matters of interest to him. Having fully attained the objects for which the journey was undertaken they set out on their return to the colony. On the way, Dr Smith was attacked by a sudden and serious illness, but had the good fortune to experience the tender and unwearied care of Mrs Shepstone, wife of the Rev. Mr Shepstone, Wesleyan Missionary in Kaffirland. In due time they arrived in safety at the Cape, having been absent about six months. Dr Smith's report, which was characterized as "an able, comprehensive, and statesmanlike document," strongly recommended that the depopulated district should be opened for colonization. The Governor highly approved of this being done, while a former Governor, who had previously disapproved of the scheme, united in urging its adoption. But the policy of the Home Government at the time was to curtail rather than to extend the boundaries of our colonial empire. On this account, the recommendation was not carried out till circumstances arose in 1842, which compelled the colonial office to take action, and led ultimately to the formation of the colony of Natal. Having arrived at this decision, the position of Lieut.-Governor was offered in the first instance to Dr Smith, which honour, however, he deemed it to be his duty to decline.

In 1829, a small party of traders* having penetrated into the interior till they reached the Matabeli territory, ruled by Umsilligar, better known by his Sechuana cognomen of Moselekatse,

* One of these traders was a man from the neighbourhood of Hawick, named Scoone.

great anxiety was manifested at the Cape for a more accurate knowledge of the tribes, the geographical features, and natural productions of the country. Accordingly, there was formed at Capetown, in 1833, the Association for the Exploration of Central South Africa,* and an influential committee was appointed, who, in a few weeks, reported that they had made the offer of the direction to Dr Smith, being of opinion that "few persons, if any other in the colony, could have been selected so well qualified for the undertaking by scientific acquirements, zeal, courage, activity, and experience as a traveller." It was arranged that his old fellow traveller to Natal, Capt. Edie, should go as second in command. The expedition was to include a surveyor and draughtsman, a non-commissioned officer, and a small party of soldiers, as guards to the wagons, of which, seven were considered necessary to secure the success of the undertaking.

In addition to the objects contemplated by the Association, Dr Smith was commissioned by Sir Lowry Cole to confer with the chiefs of the principal tribes, in order to induce them to give up their barbarous practices, to accord a more favourable reception to traders, and protection to Christian missionaries. Before arrangements were completed, considerable difficulty was experienced in obtaining the required number of Hottentot servants. The memory of the disastrous results of former expeditions, and the real or fancied danger of the present, deterred them for a time; but after much exertion the full complement was engaged; and in August, 1834, the company, numbering thirteen Europeans and twenty Hottentots, left Graaff Reinnet. Travelling by moderate stages across the parched karroo, they reached, in about a fortnight, Philippolis,† the capital of the Griquas. From this place a detour was made to visit the Coranna, Basutu, and Mantatee tribes, and to examine the country toward the sources of the Caledon river. The primary objects for which this journey was undertaken, were successfully accomplished; but the satisfaction was clouded by a serious accident to Capt. Edie, which deprived the expedition of his services; by the death, by

* The late Hon. J. E. Elliot, M.P., was a member of this Association.

† The last Sunday in the colony was spent at Colesburg, where they witnessed the baptism of forty children by the Rev. Mr Murray, of Graaff-Reinnet, who had the spiritual charge of the scattered settlers connected with the Dutch Reformed Church, and visited them three times in the year to administer the ordinances of religion.

drowning, of Corporal McKenzie, 72nd Regiment; and by one of the men being carried off by a lion.

The party returned to Philippolis in the end of November, and after a few days rest, set out for Kuruman, crossing, in the beginning of January, 1835, the Vaal river; which being in full flood, was effected with great difficulty and no little danger. In the end of the month they arrived at Kuruman, and were heartily welcomed by the Rev. Messrs Hamilton and Moffat, the latter entering into Dr Smith's plans with characteristic zeal.

It being deemed expedient to open communication with Moselekatse before advancing further, two messengers were despatched to Mosiga, then the residence of that chief, with strict injunctions to proceed with all haste, and return without delay. Meanwhile, Dr Smith decided, with a small party, to explore the borders of the Kalahari desert. Both men and oxen suffered intensely from hunger and thirst, the only supply of water for several days being obtained from pits of great depth, dug in the dry river beds by the poor Bakalahari. Ample compensation was, however, obtained by the addition of many rare specimens to the already rich collection of objects of Natural History. On the return of the messengers from Mosiga with a favourable reply, and a guide to conduct the party thither, preparations were at once made for the continuation of the journey; and, it being deemed desirable that Mr Moffat should accompany the expedition to Moselekatse, that gentleman readily acceded to the proposal, though at considerable self-sacrifice. They set out from Kuruman at the end of April, were joined by Mr Moffat, at Motito, then the most advanced missionary station in South Africa, and, though the tribes were in an unsettled state, they reached the Molapo river safely. This being the western boundary of the Matabeli country, they had to wait for permission to go on. This having been obtained, in a few days they arrived at Mosiga, and were received in a friendly manner by the king, who expressed his anxiety to render to the expedition whatever aid might be considered necessary. Mr Moffat remained with Moselekatse while Dr Smith went on to the tropics, exploring the Oori, Mariqua, and Limpopo rivers. For a time great obstacles were thrown in the way of the advance of the party, the king having professed great solicitude for the safety of Dr Smith, while in reality it was believed his sole object was

to prevent a knowledge of the extent of the desolation of the country, and of the misery entailed on the conquered tribes. Aided by the remonstrances of Mr Moffat, however, all impediments were removed, though it was evident the guides seemed more anxious to prevent communication with the inhabitants, than to facilitate the acquisition of information from them. Beyond the Matabeli territory proper, much valuable information was derived from the Baquain and Bamanguato tribes. From the former, the knowledge of the existence of a large fresh water lake* was obtained. On many points, the statements were vague and unsatisfactory, but as to its existence there was no discrepancy whatever. Under more favourable auspices an effort would have been made to have reached it, but in consequence of the dry season, the death of a number of the oxen, the reduced condition of the remainder, and other untoward circumstances, it was clear that it would have been a courting of misfortune to have made the attempt; while the successful return to the colony, of the expedition, held out the hope of future efforts being followed by favourable results. As soon as the necessary observations were made on the surrounding country, they set out on their homeward journey, by way of Mosiga, Kuruman, and Griquatown, and in due time reached the colony after an absence of eighteen months.

African exploration is not without stirring adventure, and zoological researches in that country are sometimes attended with great peril, as not a few incidents in this and former journeys could testify. With the exception of the untoward events already mentioned, however, everything had fulfilled the most sanguine hopes of the promoters. Friendly intercourse had been entered into with about thirty tribes, a good understanding had been established with nearly all the chiefs, much valuable information had been acquired regarding the manners and customs of the people, and the natural resources of the country; while the expedition returned laden with upwards of five thousand specimens of new or rare quadrupeds, birds, and other objects of Natural History, nearly five hundred drawings of the people, scenery of the country, &c., and eighteen hundred implements, weapons of war, ornaments, and other articles of interest.

* Lake Ngami first visited in 1849, by Dr Livingstone, and Messrs Oswell and Murray.

The successful completion of the enterprise was due in a great degree to the harmony and good will, which prevailed among the principal members of the party; and to the valuable assistance rendered by the Rev. Messrs Kolbe, Archbell, Allison, and Moffat, especially the last, who, having previously visited Moselekatse, had gained his confidence and esteem, and so was in a position to render invaluable service. Dr Smith was also under great obligations to Waterboor, the chief of Griquatown, who was particularly kind and communicative. To Moshesh, the Basutu chief, he was under a deep debt of gratitude, for his kindness and solicitude for the comfort and safety of the party. The most favourable impression was produced on the mind of Dr Smith, by the frank and manly bearing of this chief, and by his great intelligence and liberality of sentiment.

On the return of the expedition, a general meeting of the members of the Association was held at Capetown, Sir John Herschel presiding, when Dr Smith received a most cordial reception, and the warmest thanks were tendered to him and the other members. It was resolved to place a portion of the collection in the museum at Capetown, and that the remainder should be sent home for exhibition in London, and ultimate sale for the benefit of the funds of the Association.*

In 1837, Dr Smith returned to England, was promoted to the rank of surgeon, and stationed at Fort Pitt, Chatham. The succeeding year a representation was made to the Lords of the Treasury by Lord Glenelg, Colonial Secretary, supported by the late Earl of Minto, with a view to obtain a grant to enable the association to publish Dr Smith's "*Illustrations of the Zoology of South Africa*," at a price within the reach of naturalists of moderate means. The application was favourably responded to by a grant of £1,800, and Dr Smith, in the interest of science, completed the work without any personal pecuniary remuneration whatever. This work is the best evidence of the high position to which he attained as a naturalist. It was his purpose also to have published the "*Journal of the Expedition*;" but a severe and protracted illness laid him aside from active duties for a considerable time; and for several years his health was unequal to

* The collection was exhibited in the Egyptian Hall, London, and attracted much attention, and, when sold, realised a large sum; the *Rhinoceros Keitloa* (Rhinaster Keitloa, Br. Mus. Cat.), with other valuable specimens, being purchased for the British Museum.

the extra work involved in the publication. It, however, has not been wholly lost, as much of the information, and many of the illustrations have appeared in some of the most widely known books of African travellers, and men of science.

Dr Smith's professional advancement had been slow hitherto, but in 1841, he was made staff-surgeon of the first class, and appointed P.M.O. at Chatham. In 1845, he was promoted to the rank of Deputy Inspector of Hospitals, and transferred to London as professional assistant to the Director General. On the retirement of Sir James McGregor, in 1851, he was selected by the Duke of Wellington to succeed him with the rank of Superintendent-Inspector General, and in 1853 he received the status of Director General.

These successive appointments were received with approbation by the Medical and other journals, and satisfaction by the great body of the medical officers in the army; he being esteemed, by those best qualified to form a correct opinion, as "a man of talent and high professional acquirements, of ready and acute business habits," and "of high principle, in whom the utmost confidence could be placed."

While endeavouring faithfully and efficiently to discharge his official duties, Dr Smith had sufficient leisure to devote to scientific pursuits. He was elected a Fellow of the Royal Society and the Zoological Society, and of other associations of similar character. At this period his favourite study was the Class Reptilia, and he spared neither trouble nor expense in making his collection as complete as possible. Having numerous friends in all parts of the world, he received specimens from time to time, from every quarter, so that his collection was acknowledged to be the best in that particular department, of any in Great Britain.*

The aggressive policy of Russia in the East having led to a declaration of war by the British Government, it devolved on Dr Smith, as head of the Medical Department of the Army, to make provision for the proper care of the troops, which might be called on to take part in the struggle. To this task he brought all his energy, forethought, and administrative ability, and, long before the army was called on to take the field, he seemed to have anticipated every want; but in a short time grievous charges were

* The greater part of this collection he afterwards presented to the University of Edinburgh, and it is now exhibited in the Industrial Museum.

brought against the department in the Crimea, chiefly by the correspondents of a leading metropolitan journal ; and then followed a storm of obloquy, which burst around the head of the Director-General at home. Attacks so violent in tone are fortunately rare in the history of British journalism, and Dr Smith, again and again, was urged by his friends to defend himself from the charges brought against him, or allow those who were cognizant of the facts to do so. His invariable reply was, "that the truth would be known some day, and that he could afford to wait ; meanwhile, he would, to the utmost of his power, seek to do his duty." Into the merits of those charges it would be inexpedient to enter, but in justice to the memory of a most efficient and meritorious officer, it is necessary to say, that the tone of many of the letters and articles seemed to indicate, that other and less worthy motives were in operation, than an anxiety for the good of the service, or a solicitude for the welfare of the troops. The defeat of the ministry of the Earl of Aberdeen and the accession to power of Lord Palmerston, led to the appointment of the Sebastopol Committee, before which Dr Smith gave evidence, and put in papers thoroughly clearing himself from the charges ; and proving to all unbiassed minds, that, whoever was to blame for the disasters, assuredly it was not the Director-General. When Lord Palmerston assumed the reins of Government, he promised great changes in the constitution of the Medical Department ; changes which Dr Smith considered would decidedly operate to the injury of the service. Subsequently, the whole subject of the Administration of the Department and its future constitution, was submitted for consideration to a Committee of the House of Commons, and after much inquiry and patient deliberation, a report was presented, which, on the leading points, supported fully the views of Dr Smith. After these enquiries, the tide of opinion turned decidedly in his favour, and, on every side, justice was done to his merits. His medical brethren embraced the opportunity of bearing testimony to their appreciation of his services, and he was elected an Honorary Fellow of the Royal College of Physicians, London ; of Surgeons, Edinburgh ; of the Faculty of Physicians and Surgeons, Glasgow ; and of the Medico Chirurgical Society of Aberdeen ; while the University of Edinburgh conferred on him the degree of LL.D. ; and Trinity College, Dublin, that of M.D. (*Honoris Causâ*) ; these honours being

accompanied with addresses, couched in terms expressive of the greatest admiration of his character and confidence in his administrative capacity. Dr Andrew Wood, P.R.C.S., Edinburgh, wrote as follows :—

Royal College of Surgeons, Edinburgh,
5th August, 1856.

SIR,—It is with much pleasure that I discharge the duty which has devolved upon me as President of the Royal College of Surgeons of Edinburgh, viz.—that of intimating to you your unanimous election as an Honorary Fellow of the College, which took place on the 3rd inst.

This is an honour which is very rarely bestowed, and only for high professional acquirements or distinguished services. During the late war you have been placed in a position of great responsibility, great anxiety, and great labour. Called upon at short notice at the termination of a long peace to provide for the supply of men and *matériel* for the medical service of a large army acting at a distance; surrounded by difficulties, almost, if not altogether unparalleled, with insufficient resources at your command, exposed to much unmerited obloquy, maligned by a portion of the public press, you were not discouraged, much less dismayed, but continued firmly, perseveringly, and efficiently to discharge the duties of your high office, in such a manner as to promote the health of our brave troops, and to alleviate their unavoidable sufferings on the field of battle, in the hospital, and in the camp. Such an administration of the medical department entitles you to the gratitude of your country. The College, anxious to testify their approbation of your conduct in trying circumstances, and feeling that it is right that public men who have conscientiously and successfully discharged their duties as they consider that you have done, should receive honour at the hands of those best qualified to judge in the matter, viz.—those professional brethren have resolved to elect you one of their Honorary Fellows; and they think that you will not value the honour the less if they express their wish that it should be considered not only as a testimonial to your own merits, but also to those of the medical officers of the army, who during the late war have approved themselves not only skilful and humane, but brave and enterprising, and in all respects worthy of the confidence of the army as well as of the country.—I have the honour to be, Sir, your most obedient servant,

ANDREW WOOD, M.D.,
President R.C.S., Edinburgh.

Dr Andrew Smith, Director-General of the
Army Medical Department.

The strain of the direction of the department during the war had been too severe for the somewhat impaired constitution of the Director-General, but he remained at his post till there had been issued from the press the “Medical History of the British Army,” and documents arranged for the information and guidance of his successors in any future war, and then, having served his

country for forty-two years, he sought to be relieved of his duties. General Peel, then Minister for War, acknowledged his resignation in the following terms :—

War Office, 11th June, 1858.

SIR,—I have received your letter of the 22nd ultimo tendering the resignation of your appointment as Director-General of the Army Medical Department.

After the long period which you have devoted to the public service, and under the circumstances of impaired health, which you urge as your reason for wishing to retire from your onerous and responsible situation, I cannot hesitate to accede to your request.

It will be my duty to recommend, through His Royal Highness the General Commanding-in-Chief, without delay, for Her Majesty's approval, the name of your successor, and also to recommend in the strongest manner to the Lords Commissioners of Her Majesty's Treasury, that you may be permitted to retire on the full salary of your appointment.

I avail myself of this opportunity to express to you the sense I entertain of the zeal and devotion to the public service which you have always evinced in the discharge of your duties, and of the most laborious and anxious character of those services at times of unexampled difficulty.

I have the satisfaction of knowing that my opinion of the manner in which you have filled the office of Director-General of the Army Medical Department is concurred in by my predecessor in office, and you will retire with the assurance that you have faithfully and zealously discharged most arduous and important duties.

I have the honour to be, Sir, your most obedient humble servant,

J. PEEL.

A. Smith, Esq., M.D., &c.

Her Majesty, the Queen, who, both personally and through his friend, Sir James Clarke, had repeatedly expressed her sympathy for him under trying circumstances, now conferred on him the dignity of K.C.B., which honour was a source of gratification to his friends, and to the profession of which he was a member. The *Medical Times*, in a leading article, adverting to this, said that "the conspicuous and comprehensive ability, the industrious and energetic zeal, the self-denying devotion to the welfare of the soldiery, and of the medical staff, which Sir Andrew Smith displayed, from February, 1854, the date of his preliminary enquiries and measures in Bulgaria, until the embarkation of the sick at Scutari, in June, 1856; tried and proved by this incontestable evidence, we most conscientiously pronounce the subject of this notice to have well merited the grateful and opportune reward conferred on him by his sovereign."

Freed from the cares of office, he had ample time to bestow on those studies which had ever been so congenial to his disposition, and, for a few years, he devoted great attention to African exploration, but more especially to all that had reference to the native tribes inhabiting the southern portion of that continent.

All circumstances seemed to give promise of a serene old age, when he would reap the fruits of a well-spent life of activity and usefulness; but in 1864, he was called to mourn the loss of her, who for more than twenty years, had been the cheerful, warm-hearted and faithful partner of his lot; and the death of Lady Smith, was followed the succeeding year, by that of a loving gentle sister, to whom he was ardently attached, and whose tender sympathy for him, in his great loss, had been as balm to his wounded spirit. Lonely, stricken with grief, and the infirmities of years gathering around him, he lost nearly all interest in those pursuits which formerly had been his delight; and, toward the close of his life, most of his time was given to the perusal of books of devotion, and the study of the Holy Scriptures.

In the spring of 1872, the state of his health and other circumstances gave great anxiety to his friends. During the summer he appeared to have rallied, and hopes were entertained that all would be well, but on the 6th of August, when out for a drive, he was suddenly seized with illness and taken home; and, notwithstanding the assiduous care of his ordinary medical attendant, and of his friends, Sir William Jenner and Mr Quain, he gradually sunk till the morning of the following Sunday, when he peacefully passed away in the 75th year of his age.

Sir Andrew Smith was a man of great force of character, of untiring industry and perseverance, and of unbending integrity. Doubtless his energy and decision would occasionally seem to lead to impetuosity; and his firmness of purpose, at times, approach to something like obstinacy; yet these qualities enabled him to overcome difficulties, which to men of less inflexible resolution, would have proved insurmountable. Though he ever maintained strict discipline in the department over which he presided, he was always found to be the firm and constant friend of the man, who faithfully sought to do his duty.

In private life he was genial and kind-hearted, a man who could never look on distress of any kind without doing his utmost to relieve it. He was loved and respected by all who knew him, but most by those who knew him best.

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48 *The Ornithology of the Dunbar Coast*, by Robt. Gray.

22. Exhibition of some small Quadrupeds collected in South Africa.—Ibid. 1837, p. 69.
 23. Revision of the Groups included in the Linnæan genus *Squalus*.—Ibid. 1837, p. 85.—Ann. Nat. Hist., i., 72.
 24. The Characters of two new Genera (*Pleurotuchus*, *Chrysopelca*) of South African Reptiles, with descriptions of species belonging to each.—Mag. Zool. and Bot., i., (1837), pp. 141-145.
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 26. Contributions to South African Zoology.—Ibid. ii., (1838), pp. 30-33, 90-94.
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The Ornithology of the Dunbar Coast. By ROBERT GRAY,
F.R.S.E.

The Ornithology of East Lothian offers many features of interest. I have already referred to some of these in the Club's "Proceedings," but on the occasion of our meeting in a district which has perhaps no resident observer at present, it may not be out of place to pursue the subject further, and occupy the time of the meeting for a few minutes with a rapid sketch of the birds that are found upon the Dunbar coast at different seasons of the year.

In spring and autumn, birds of prey are often seen prowling along shore, and among those of particular interest that have come under my own observation I may mention the *White-tailed Eagle*, *Peregrine*, *Merlin*, *Rough-legged Buzzard*, *Marsh Harrier*, and *Short-eared Owl*, all these species having been killed in more than one instance on or close to the beach. Of these, however, only three can be regarded as regular visitants, viz., the *Peregrine*, *Merlin*, and *Short-eared Owl*—the others being rare, or occurring at irregular intervals. On the Bass Rock, and some of the adjacent

rocky islets, the Peregrine has, of late years, maintained its hold, and a friend mentioned to me a few days ago that he had just seen a pair on Fidra. I regret, however, to add that two *pairs* (m. and f.) have been killed there within the last three months. The Merlin appears regularly in spring and autumn on the links to the east of the town, in pursuit of Snipes and Wheatears, for which it shews a decided partiality—the last named bird being often chased into rabbit holes, where it generally manages to elude capture. I have observed the Short-eared Owl arriving from the sea in early morning in the month of September, and have put up as many as a dozen from the rocks below high water mark, in the course of an hour's ramble. These were probably of Scandinavian origin, though many pairs breed in Scotland in localities between East Lothian and Caithness.

The *Red-backed Shrike* has occurred at Broxmouth—a pair having been seen, and one of the birds shot in 1856. I never fail to observe the *Dipper* in winter and spring at Broxmouth burn, its familiar habit of curtsying as it wheels round on its stony perch, attracting almost daily observation. I have not noticed this persistent habit of frequenting the sea shore in the *Dipper* elsewhere.

In winter, *Redwings* and *Fieldfares* often appear on the beach in very considerable numbers, and seek a scanty subsistence from the heaps of decayed seaweed—the accumulation of many storms. The *Redstart* is likewise found among the rocks below high water mark, doubtless in quest of insect prey. This bird seems to arrive with the *Wheatear*, as I have often observed after a favourable south-east wind, about the end of March or beginning of April, both species in numbers along the coast. I have also observed the *Sand Martin*, *Common Martin*, and *Swallow* arrive in the same way—large flocks speeding northwards and giving off detachments as the main body proceeded to their accustomed haunts in more northerly districts. The *Golden Crested Wren* is another bird which I have often seen arriving in autumn from “over the sea,” and migrating northwards in spring by the coast line.

Among the *Pipits*, the *Meadow Pipit* is sometimes very abundant in winter, and the *Rock Pipit* is also an object of daily interest during the whole of the year along the rocky shores of East Lothian. I may here refer to the occurrence

of the *Pennsylvanian Pipit* (*Anthus ludovicianus*) in some numbers near Broxmouthe, about thirty years ago, at which time I took daily notice of the birds as they frequented the partially frozen stream, issuing from the pond in the Duke of Roxburghe's policies. The *Shore Lark* (*Alauda alpestris*) has occurred at the Tyne estuary to the west of the town—a small flock, from which at least three birds were procured, having appeared there in January, 1859. Ten years later—namely, in November, 1869, another specimen was obtained there. Swarms of *Snow Buntings* often appear on the coast in autumn and winter; and among the *Corvidæ* the *Carrion* and *Hooded Crows* are well-known visitors to the shores at low water in the winter months; at that season of the year they subsist on stranded fishes, and often upon birds that have been shot at and lost by the shore shooters. Many times I have found Golden Plovers, Redshanks, and other waders torn open and partly devoured—birds which I had killed the night previously, though unable to retrieve them in the darkness.

The *Kingfisher* is fortunately becoming more plentiful, and is now seen with tolerable frequency on various parts of the coast near fresh water pools, or at the junction of any small stream with the sea. This seems a favourite haunt everywhere.

I have elsewhere commented upon the *Wood-pigeon*, which, of late years, has certainly not become diminished, although upwards of 130,000 birds were reported to have been killed during the space of little more than six years, ending June, 1870. I attribute this remarkable fact to the circumstance that very large flocks of these birds come to us from more northerly latitudes. I have myself seen them alighting on the beach at daybreak, apparently just in from a long and fatiguing flight.

There are now no haunts of the *Rock dove* in East Lothian, so far as I know, except the Bass Rock. Berwickshire, however, can still boast of several breeding caves, although it is doubtful whether the birds can be regarded as of a pure breed. The *Turtle dove* has also occurred off shore in spring.

Among the game birds, I have observed that *Pheasants* and *Partridges* frequently repair to the beach in spring and autumn, where they possibly find attraction in the larvæ that are bred among the decayed seaweed. In 1863, one

specimen, at least, of that curious bird, *Pallas' Sand Grouse*, was taken on the coast near the town, while about twenty others were seen on the shore at Seacliffe.

The Golden Plover is very abundant in autumn and winter along the rocky parts of the coast, and the *Grey Plover* is not unfrequently found in small flocks, especially on Tyne sands, near the estuary, where it is seen feeding in company with Godwits and other waders.

The Dotterel (*Charadrius morinellus*) is now rare—a few being seen during their autumnal migration. Westwards they are met with on Güllane links, but their stay is short and their movements very uncertain. Passing over the *Ringed Plover*, which is resident all the year; the *Sanderling* and *Turnstone*, which are regular autumnal and winter visitants; the *Lapwing* and *Oystercatcher* which, though resident, are, to some extent, migratory; the *Heron*, resident, and a native of the district; I may remind the members of the *Great White Heron* (*Ardea alba*), which was shot on Tyne sands in the month of June, 1840. This beautiful bird is still in the collection of Lord Haddington, at Tynninghame House. The *Common Bittern* has been found near the coast, and the *Spoonbill* (*Platalea leucorodia*) was on one occasion identified on Tyne Sands by the late Mr John Nelson, of Broomhouse. The *Curlew* is everywhere common, and the *Whimbrel* is well known—not in May on the passage northward, as is the case on the west coast, but in autumn when going south. My observations for more than twenty years on the western shores corroborate this, as the *Whimbrel* there is very numerous during eight days in the beginning of May (hence the name May fowl often applied to the bird), while none are ever seen on their return journey.

The *Redshank*, a few pairs of which breed on the Lamermoor, finds its way shorewards in autumn, and remains until the following spring. The *Green Sandpiper* has been found on the banks of the Tyne and other streams not far from the coast, and the *Common Sandpiper* (*Tringa hypoleucos*) is a regular frequenter of the shingle below Broommouth Park, in August, and early part of September, just before migrating southwards. I recollect seeing one pursued by a Sparrow-hawk drop into the sea, and remain a few seconds out of sight until the baffled hawk flew away, after which it came to the surface and hurried into the nearest shelter.

I have met with the *Greenshank* in autumn but not at other seasons; it is by no means numerous. The *Black-tailed Godwit* has oftener than once been obtained in the Tyne estuary, and the *Bar-tailed Godwit* is met with in considerable numbers, but only in the estuary. With regard to this bird, it is worth noticing that a very large proportion of these flocks may be said to be birds of the year, with a blush of brick red over their plumage, and distinguishable by their much shorter bill. The *Ruff* is found on the muddy parts of the estuary of the Tyne, chiefly in September. Like the *Sanderling*, its stay is short and its movements uncertain. I have, on several occasions, put up *Woodcocks* from the marshy parts of the coast line; also *Common* and *Jack Snipes* in similar situations. In the autumn months *Snipes* are seen regularly frequenting the rocks below water mark, where they are much sought after by the *Merlin*.

The *Curlew Sandpiper* sometimes appears in very large flocks during April and May, on its passage northwards, and again, though apparently in much smaller numbers, in the first or second week of August, on its way southwards. The same remarks apply to the *Knot*, but its movements appear to be subject to greater irregularity. The *Little Stint* may now be regarded as a regular winter visitant to the Tyne estuary. In some seasons it is less common than in others. The *Dunlin* is abundant, and the *Purple Sandpiper* may be called a characteristic bird of some parts of the coast; where it is sure to be found in rough weather flitting among the wet rocks, and cleverly eluding the salt spray, which often dashes into the midst of a flock while busy feeding.

The *Grey Phalarope* and *Red-necked Phalarope* have both occurred, but at rare and uncertain intervals during winter. The *Spotted Crake* and *Water Rail* have also been shot near to the coast. I have repeatedly met with the *Water Rail* on the sea shore near Broxmouth. In each instance the birds were frozen out. The *Coot*, I have actually seen out at sea in severe winters. Among the *Natatorial* birds, the *Greylag*, *Bean*, and *Pink-footed Geese* are frequently met with, and the *White-fronted Goose* has also been killed on the coast in several instances. The *Bernicle* and *Brent Geese* are much less common than the three first

named species. The *Egyptian Goose*—doubtful as a wild bird, or rather certain as an escape—has been shot repeatedly on various parts of the coast. The *Hooper* and *Bewick's Swan* have both occurred in many instances, both in adult and immature plumage. The *Sheldrake* may be said to be well-known, though shy and affecting only the less frequented parts of the coast. The *Pintail Duck* is not altogether a stranger in the winter months, and the *Teal* and *Wigeon* are both abundant. In some seasons Wigeons are seen in extraordinary numbers in the Tyne estuary. Some years ago the excessive increase of this bird was accounted for, on the supposition that they had been driven from other estuaries by the punt shooters. There was doubtless some truth in the surmise. The *Eider Duck* is a somewhat prominent bird on the coast, and is found in all states of plumage. This bird is a native of the district, and resident all the year in limited numbers, and a large accession to the flocks takes place in September. I have seen noble specimens shot along the coast—males and females, and young of both sexes—the immature males especially being in interesting plumage. My friend, Mr Hardy, writing to me on the 20th April, speaks of having counted 26 Eider Ducks off Siccar point, one day during the previous week, and I have seen almost double that number at one time off shore on a fine clear day in December. The *King Duck* has once been observed, as recorded by the late Dr Nelson, of Pitcox. The *Velvet Scoter*, *Common Scoter*, *Scaup Duck*, and *Tufted Duck*, are all equally common, and may be seen every winter feeding in mixed flocks over Tyne sands when the tide is full; and throughout the winter months that beautiful and lively bird the *Longtailed Duck* (*Harelda glacialis*) may be seen along shore in fair weather, or foul, gathered into groups and attracting attention by their curious gambols and shrill and varied notes. I have, as I have elsewhere recorded, spent many hours in watching the habits of these gay and restless creatures, as they sat at their ease on the heaving water outside the pier heads at the old harbour of Dunbar. The *Golden Eye* is also a conspicuous duck at the same season, and the *Smew* has several times been taken on Belhaven sands and the mouth of the Tyne. The *Red-breasted Merganser* is very common in autumn, winter, and spring, especially at the junction of small fresh water streams

with the sea, where they find abundance of food. The *Goosander* is much less common, but Dunbar shared recently in the unusual abundance of the species.

Among the Grebes which frequent the shore may be mentioned the *Great Crested*, the *Red-necked*, *Sclavonian*, *Eared*, and *Little Grebe*, or *Dabchick*. It was from this district that I, many years ago, recorded the regular occurrence of the Eared Grebe in autumn and winter. All the species I have mentioned are found feeding on comparatively calm days just off shore, chiefly on the rocky parts, from which I infer that their principal food must be obtained in rocky situations. The *Great Northern Diver*, *Black-throated*, and *Red-throated Divers*, have all been obtained in the end of autumn, at which season they have assumed their winter dress; but in spring they are frequently taken in full breeding plumage—these examples being, doubtless, birds which, having been much further south in their annual migration, were then on their way north—preceded, of course, by those which had spent the winter in this neighbourhood.

The *Common Guillemot* is, keeping in view the nearness of this district to the Bass Rock, and the breeding ledges at St. Abb's Head, very abundant, especially in autumn, when the birds have left the rock attended by their young ones. The ringed variety (*U. lachrymans*) is, curiously enough, very rare in this quarter. The *Black Guillemot*, formerly well-known in the neighbourhood of the Isle of May, is rather scarce, and is only met with out at sea. The *Little Auk* may be said to be a regular winter visitant in considerable numbers, and is frequently killed when flying along the rocky parts of the coast. In severe storms many Little Auks are driven shorewards, and sometimes inland to considerable distances—on which occasions they become either enfeebled through hunger or crippled by the effects of the storm.

The *Puffin* and *Razor-bill* are both met with in moderate numbers. The Puffin, however, is much scarcer of late years, and throughout the east of Scotland generally, I should say there is only one Puffin for twenty on the west coast. It is a migratory bird, and all those bred on the Bass disappear early in September, by which time, however, or very soon afterwards, they are replaced by other flocks from Arctic waters. Thus the Puffin cannot be said to be ever absent from the Dunbar coast. The *Common Cormorant*

and *Green Cormorant* are well known, and the *Solan Goose* is, as may be supposed, an object of daily occurrence, especially in Belhaven Bay, where it occasionally congregates in thousands, and creates a bird spectacle of unusual interest to inland observers.

Thirty years ago, the *Sandwich Tern* was a very plentiful bird off shore in autumn, but I suspect it is now rather uncommon. It was one of the objects of my early studies when a lad at school here, and I often stood in wonderment listening to the sharp cries of the birds, as they came within a few yards of the strand, and plunged their breasts into the rippling waves for sandeels. At that time there was a beautiful stretch of sand near the back of the old harbour which is now covered with stones. These autumn visitors are never seen now. Some of them, no doubt, came from the Bass rock, whence I have taken their eggs, and also from the adjacent rocky islets, but the greater number probably had just left the Farne islands, which were then one of the chief haunts of the species in Britain. The *Lesser Tern* is frequent at Tyne sands, and breeds on the coast a mile or two west of the estuary. The *Black Tern* is rare—only one or two examples having been shot. It may here, however, as elsewhere, be a more frequent visitor than is supposed, especially in the plumage of the first year. I have seen the *Little Gull* on the coast repeatedly, specimens having been shot at Dunbar and North Berwick. The *Black-headed Gull* is only a winter visitant to the beach, and the *Kittiwake*, *Common Gull*, *Lesser Black-back*, *Herring Gull*, and *Great Black-back* are familiar birds along the coast, as might be expected from its proximity to the Bass rock and St. Abb's Head—the two nurseries for all the species. The *Glaucous Gull* is now very often observed, having, of late years, come in large numbers to the Frith of Forth, from Arctic seas. The *Common Skua*, *Pomarine*, and *Richardson's Skua* are autumn visitants; and the *Fulmar* and *Storm Petrels* have both been driven on shore in foul weather.

In conclusion, I have to remark in connection with this district, that although it has been well, and, I may add, successfully investigated by various observers, no one need despair of finding new material for future papers. Since the time when Mr Archd. Hepburn wrote his most interesting

letters to the late Professor MacGillivray, East Lothian has proved an increasingly fertile field of observation. The late Dr Nelson, of Pitcox, and his brother, Mr John Nelson, now also lost to science, did good service in forming collections and reporting on the occurrence of some of the rarer birds of this shore and its neighbourhood; and the late Dr Turnbull contributed to ornithological literature a beautifully illustrated Catalogue of the birds of the county, with occasional references to what has been found on the Dunbar coast. The district, as I have said, possesses not a few attractions as bird haunts; the Bass rock and neighbouring islets with their wondrous hordes of native sea fowl on the one hand, and St. Abb's Head and Fast Castle with their beetling cliffs and similar nursery ledges on the other. The intervening shores, especially those near the town, present a succession of changes—frowning rocks, sandy bays, and pebbled nooks; scenes which appeal to the ornithologist in all their varied aspects; in sunshine and calm, when the sea sleeps in wearied murmurings within the ridge of red sandstone rocks forming a shore guard, and hundreds of piping waders tell their varied names; in gloom, when the white-edged waves roll menacingly over the stones on the sloping beach, and the young of the rock-bred birds swim anxiously in their search for a quiet landing place; in storm, when the turbulent ocean shews itself in all its power, throwing mass upon mass of wrathful spray on sands, walls, rocks, and ruins, until the entire coast line is fringed with wreaths of foam. Then the note of the Northern Hareld strikes the ear, issuing from the midst of the wild waters—its strangely concerted melodies forming a fitting accompaniment to the deep booming of the waves that beat upon the beach. Then, too, may be heard the melancholy cry of the Great Northern Diver, that weird “Herdsmen of the deep,” whose shouts, from a distance, have been likened to the despairing cries of a drowning mariner. All these sea voices have been familiar to me from my youth. Here, I had my first and perhaps most lasting impressions of scenes which I in vain try to describe; and, although, in later years I have been charmed with the scenes of other shores, none have impressed me more in their seasonal aspects and general interest than the coast whose winged fauna I have thus briefly recorded.

Vindication of Bishop Bek's disposition of the Barony of Alnwick. By the late Rev. W. PROCTER, M.A., Doddington; Hon. Canon of Durham.

Camden, in his *Britannia*, has published a slanderous tale, which, being against a bishop, has been oft repeated, and has been stated as an undoubted fact by Mr George Tate, in his "History of Alnwick," and again in his "Account of Lesbury Parish," printed in the Proceedings of this Club, for 1875, pp. 441-2. This tale, however, was proved to be false, by Arthur Collins, in his "Peerage of England," vol. ii., pp. 303 and 489, fifth edition.

Camden's words are, "William, the last of the Vescies, made Anthony Beck, Bishop of Durham, trustee to his castle and the demesne lands belonging to it, for the use of his natural son, the only child he left behind him. But the bishop basely betrayed his trust, alienated the inheritance, selling it for a present sum of money to Henry Percy, since whose time it has always been in the possession of the Percies." Tate says, "The deed by which William de Vescy infeofed Bek seems now not to be in existence." But Collins found it in the Great Chartulary of the Percy family at Sion House, fol. 129,2, and prints it "fully to refute the story," as it certainly does, and so shakes our confidence in Camden's general accuracy, shewing him not to have been free from the prevailing infirmity of believing confident assertions oft repeated, especially if they are slanderous.

This deed shews that "William de Vescy levied fines, by which he conveyed all his manors of Malton, Langton, Wyntringham, and Brumpton, in the county of York; and of Calthorp, in Lincolnshire, to the bishop in trust, for the use of his natural son, named William de Vescy of Kildare, who afterwards enjoyed the same; and that he gave the manors of Alnwick and Tughall, in Northumberland, absolutely to the said bishop and his heirs for ever." Besides, Henry Lord Percy, the purchaser, had his title confirmed by Sir Gilbert de Ayton, cousin and heir of William de Vesci. And who can suppose that the Percies, ever since 1309, have been quietly possessing the barony of Alnwick on a title founded in fraud?

Collins gives in the original French an exact copy of the Deed by which William de Vesci infeofed Bishop Bek, accompanied

with a literal version. The French deed begins thus :—"As tous yceaux qui cestes Lettres verront ou orrount William de Vesey salut en Dieu, &c., &c., &c." But the English version will suffice for our purpose :—"All those, who these letters shall see or hear, William de Vesey greeteth in God. Know ye that the Fine between our dear Father in God, Anthony, by the grace of God, Bishop of Durham, and US, of the Manors of Malton, Langton, Wyntringham, and Brumpton, in the county of York (and) Calthorp, in the county of Lincoln, shall be levied in this form ; That is to say, that the aforesaid Bishop shall acknowledge the said Manors to be our right, to hold to us and our heirs of our body, begotten of the chief Lords of the Fees. And, if we dye without heir of our body begotten, That the aforesaid Manors remain to William de Vesey of Kildare, and to the heirs begotten of his body, of the chief Lord of the Fees. And if William de Vesey of Kildare dye without heir begotten of his body, That the said Manors remain to our other right heirs for ever. And the Fine, which shall be levied between our dear Father in God the Bishop aforesaid and US of the Manors of Alnwick and Tughall, in the county of Northumberland, shall be levied in this Form, That is to say, That the aforesaid Bishop, shall acknowledge the said Manors to be our right in court, shall surrender them to us to hold, to ourselves and our heirs of our body begotten of the chief Lord of the Fee by the due and accustomed services ; And, *if we die without heir of our body begotten, that the aforesaid Manors of Alnwick and Tughall remain to the Bishop and his heirs for ever*, in testimony whereof to this Bill patent we have put our seal. Given at Stapilford, in the county of Leicester, Saturday next, before the feast of All Saints, in the twenty-third year of the reign of King Edward, son of King Henry."

Memoir of the late Captain James Forsyth, M.A., Bengal Staff-Corps, &c., &c. By his Father, the Rev. JAMES FORSYTH, D.D.

The subject of this brief memoir was my second son by my marriage with Elizabeth, eldest daughter of Robert Brown, Esq., of Whitsome-Newtown, Berwickshire. He was born on 12th of January, 1838, at Morham, near Haddington, of which small parish I was then Incumbent. In 1843, I removed with my family to Aberdeen; and after a due course of preparatory instruction in the excellent schools of that city, especially an attendance of five years at its ancient Grammar School, which the system of mental training and discipline in the study of Latin, pursued by its eminent rector, Dr Melvin, had then rendered famous, James entered as a student at Marischal College, now merged in the University of Aberdeen. He signalised his entrance on his College curriculum by carrying off, after a severe competition, the first bursary, and at the close of it, graduated with distinction; but he did not lay himself out for the honours of a prizeman; and was content with merely making a creditable appearance in his successive classes, with the exception of mathematics and natural history, to the study of which he applied himself with vigour and assiduity. In fact he had even then firmly resolved as to his future career in life; and was ambitious solely of preparing his mind, as well by private and independent study, as by professorial instruction, for the successful application of its powers and resources in whatever direction fortune and events might determine. I found that James was fixedly bent on going to India as a military cadet, so much so indeed, that I was left no alternative to doing my best to procure an appointment for him. I applied without delay to Colonel Sykes, then President of the India Board; and my application was successful, although it might be several years before his promise could be made good.

The promise was made, however, to James's great delight, and he set himself to improve the interval in preparation for his Indian life with the greatest alacrity.

He was a devoted lover of sport; the rifle had already become a pet weapon with him, and target practice with it on the lonely sea-beach, in the early summer morning, was his frequent and favourite exercise.

With such an ardent passion for sport, and this directed to India for its freest and highest gratification by the sporting adventures depicted in such works as the "Old Forest Ranger," I am persuaded that the main attraction of India lay in the splendid field it offered for the highest and noblest order of sport, in the pursuit of the wild and savage denizens of its forests and jungles, its mountain gorges and plateaux ; and the main inducement to his preference of the military to civil life there, would be found less in any ambition of military distinction, than in the more ample leisure and opportunity which life in cantonments was likely, under the peaceful and steady sway of British rule, to afford for the forays of the sportsman. Feeling now secure of the object on which he had set his heart, James applied with redoubled zeal to the work of preparation. He resumed with greater steadiness his practice and study of the rifle. He afterwards made an excursion of some weeks to the rocky shores and inlets of Shetland, the resort of the seal, the osprey, and the larger sea birds, to test his skill and success in the use of his weapon. He attended for a session at the Military Academy in Edinburgh, to qualify himself in field surveying and fortification, in sword exercise, in fencing, drill, and riding. Trusting to his facility in acquiring languages, he deferred the more especial study of those of India until he should be resident there, and he devoted his private reading to acquainting himself with the history, the physical aspects, the races, religions, and the general character of the country in which he expected to spend the future of his life.

Being now in his 18th year, he became naturally impatient for his summons to the India House. It came at length, and he was ordered to attend for examination for a cadetship at Addiscombe, a few weeks after. He did not apprehend the examination would prove a very formidable one, but, lest it might possibly take a turn, which he could not anticipate, he attended for a short time a qualified instructor of candidates, and became a pupil of Mr Ryde, at Croydon. He passed all his examinations with *eclat*, and was nominated, at his own request, to a cadetship in Bengal Presidency.

My son arrived in Calcutta in the beginning of April, 1857, and was forthwith appointed to do duty with the 37th Bengal Native Infantry at Benares. He did not remain long, however,

at that depôt of military instruction, and was ordered shortly after to join the regiment to which he was to be permanently attached, the 49th N. I. at Meean Meer. He resolved on making a leisurely journey of it, that he might see something of the country. Had he been aware of what was impending he would have hastened forward, and so probably escaped the perils to which his delay exposed him. The Sepoy revolt, so long secretly preparing, was now imminent, and on the very day of his arrival at Delhi, broke out, in all its violence of rapine and massacre. On reaching that city, he asked admission to the traveller's bungalow, but was informed that it was fully occupied, mostly by ladies. He resolved therefore to proceed, leaving his baggage to its fate (all of which excepting what he carried with him was lost) and it was well he did, for scarcely two hours after he left, the bungalow was sacked, and plundered, burned to the ground, and nearly every person in it massacred, and the wildest destruction revelled in the city. He records in his journal his gratitude to Almighty God for the narrow escape he had made. He had got as far as Umballah, when he learned that the Sepoy regiments at Meean Meer had risen, and his own among the number, and that the rebels were along the roads bent on murder and plunder. What was he now to do? He was not a whit in greater safety to remain where he was than to go forward. Arming himself with rifle and revolver, he determined to go on, resolved to sell his life at the dearest. For thirty-six hours he travelled on his way in the greatest alarm, from the yelling and hooting of the mutineers all around him. However, none came directly in the route he had taken, and at length all the yelling ceased. He then uncocked his rifle and gave himself up to the repose which exhausted nature demanded. When he arrived at the Cantonments, there was the greatest surprise at his escape. The details of this most perilous journey were given in a letter to myself published in *The Field*, in which he says, that on arriving at Meean Meer he found the officers in a state of defence, all assembled in the adjutant's bungalow, doors and windows barricaded, guns, pistols, and rifles loaded, and every preparation made for holding out until relieved. This, he says, is what is called joining your regiment.

My son remained connected with the army as a regimental officer for about five years, concluding his service by acting as

adjutant of his regiment. His experience of military life during these years was by no means such as to inspire him with a desire to continue in active service. He was not permitted to volunteer and join those who were engaged in open conflict with the mutineers, and to him was assigned the unpleasant task of keeping watch and ward over disarmed and sulky Sepoys, whose sympathies were all with the rebels. At times too, duties of the most revolting nature fell to him, under the severe measures adopted by the commanding officer, such as superintending the execution of those who were caught red-handed in the atrocities perpetrated by the rebels, and who were condemned sometimes by scores to be blown into fragments from the guns. And although the dull routine of cantonment life after the rebellion was suppressed, was broken in upon for a time by the active but unsuccessful search for the arch fiend who was the instigator of it, and at rare intervals he took part in a foray in the jungle or forest; yet he could not repress the longing for employment more congenial to his tastes, and affording ampler leisure and freedom for the indulgence of his sporting proclivities.

In the latter part of this period, he bestowed a great deal of his attention on the artillery with which the Indian sportsman was furnished for his encounter with the larger and more savage animals, with a view to render it more safe to himself, and more immediately destructive to his prey. The result was his invention of the explosive bullet, known as "Forsyth's shell," and an improvement of the rifle, so as to increase its power and secure the more direct and accurate flight of its projectile.

The details of his invention; which he could not be persuaded to patent, were freely given to the sporting world, in *The Field*, and afterwards more fully, along with his suggestions respecting the rifle, in his work on "The Sporting Rifle and its Projectiles," a work highly appreciated by sportsmen, and still forming a standard one on the subject. He was preparing for a third edition of this little work, adapted to the changes consequent on the introduction of the breech-loader, at the time of his death.

The institution of the Staff Corps, in 1861, seemed to my son to open the way for him to such employment as he now coveted, and after a mature consideration, he applied to Mr Temple (now Sir Richard) to be admitted a member of it, in connection with

the Central Provinces, over the administration of which Mr Temple presided. He was readily received, being well-known to Sir Richard, for his energy, activity, and general ability as an officer, in addition to the high repute he had already won for himself as a Shikari. Nor was he long of obtaining an appointment in the highest degree congenial to his tastes, namely, that of "Assistant Conservator of Forests."

The Forest service was a department of the administration established for the purpose, more especially, of rescuing the immense primeval forests of the provinces from the wanton destruction to which they had so long been exposed, by the natives in particular, who were in the habit of felling and burning the large and valuable timber trees, in order to use the ashes for manuring their patches of crop; other parties, however, besides the natives, had long been making inroads upon these valuable woods for building and road making purposes. It was high time that a system of protection should be instituted, and provision made for regulating the sale and use of the timber, and for improvement by the destruction of useless scrub; as also by drainage, and by the introduction of new species of wood, so as to turn to profitable account so important a source of national wealth.

Besides the forests, there were vast tracts of cultivable lands, and rich pasturage along the slopes of the hills and the higher plateaux, to be surveyed and reported upon, and the mineral wealth of the district also had to be ascertained. All this was embraced in the objects of the department with which James was now to be connected, of which his friend, Captain Pearson, was at the head. There was to be assigned to the staff of explorers, an area extending to 36,000 square miles of this unexplored region; the work of surveying and reporting on which would necessarily stretch over a considerable number of years. The term of engagement, however, for each member of the staff, was three or at most four years, and their labour was very arduous and exhausting. James was made aware moreover that the work was highly perilous to health and life, from the malarious condition of a great portion of the country, and he was strongly urged by his friends to decline the employment. But in the glorious field for sport presented to him, abounding as it did in the noblest game of all kinds, there was an attraction greater than the peril to health could out-weigh. He had besides already had some experience

of it in a short excursion, which he had made in the valley of the Narbudda and its tiger haunted ravines, in order to test the power of his newly-invented shell ; and with recollections of the sport he then enjoyed, he eagerly accepted the appointment, and applied himself diligently to prepare for its duties in all ways, particularly by the study of Forestry and Forest-Botany.

The portion of the vast tract specially allotted to James and his companion, Captain Burton, as a scene of their labours, stretched onward along the Sâtpûra range of hills, from the Mâhâdeo section to the Mykal, terminating in the Amarkantak district and its remarkable Promontory. And the yearly reports made by them to their chief, and appended to his progressive report, bear ample testimony, in the multitude of details of all kinds which they contain relative to the several objects of the survey, to the labour and care they had bestowed on the duties assigned to them. They had indeed a large band of trained assistants and native labourers to help in the work, but all had to be personally superintended by themselves, and this often in large tracts where neither elephant nor horse could be of service, and all had to be gone about on foot. The explorations could only be carried on in the cold season, that is at furthest six months. The intervening time was partly occupied in extending their reports, but in great part also in those hunting expeditions which the band of explorers were encouraged to undertake, for the deliverance of the natives from the terror and ravages of the tyrant of the jungle, and other ferocious and destructive beasts of prey, which had multiplied greatly during the war of the mutiny, and become more daring and fierce in consequence of the disarming of the natives. My son had preserved his health wonderfully throughout these explorations, until the last, which led him "to the far East" into a district deeply infected with malaria, arising from the foetid tanks and crumbling ruins, the relics of the grandeur of decayed dynasties, when the native tribes were Powers, and had their kings and palaces. The region thus infected was the resort of the Buffalo and the wild Elephant, and he had anticipated with ardour the opportunity of trying the power of his rifle on such gigantic quarry. His ardent hopes, however, were ere long put an end to. He and his companion had only had a few perilous, although successful, encounters with a herd of buffalos, when he was laid prostrate in

sickness. One day, returning from exploring amid the ruined abodes of ancient royalty, he imprudently lay down to rest, and fell asleep in the open air. The poison entered his veins, he was seized with fever, issuing in small pox, and was obliged to cease from all active work, and seek refuge in a ruined hill fort. For weeks he remained in a feeble state, and when sufficiently recovered, he had to find his way along a rough and fatiguing road, to his forest bungalow. That forest home he had erected for himself at the commencement of his labours, as a place of retreat when not engaged in these, selecting for it a spot of remarkable grandeur and beauty near the shrine of Mahadeo, not far distant from the celebrated Marble Rocks, on the Narbudda, with the eternal verdure of the great Sal Forest, the far stretching valley of the river and the lofty mountains surrounding its sources, all before his eye. In this retreat, which he had named "Bison Lodge," he spent many a solitary hour, recording in his journal the scenes and adventures that were afterwards to be embodied in his work on "The Highlands of Central India," completing his sketches of remarkable scenery or incidents, refreshing his spirit with loving study of his Shakespeare, penning his letters to friends at home, and indulging meanwhile mayhap the fond recollections suggested by his employment.

On his retirement from the Forest Department, which, on many accounts, he had highly enjoyed, he was offered the important office of Settlement Officer of Nimar. He accepted of it, being one of considerable preferment. Previously, however, to entering on his duties, he took privilege leave of three months to Europe, to get the benefit of the sea voyage, visit his friends at home, and see the Paris Exhibition on his way back.* Returning to India with invigorated health, he took up his new work with alacrity and diligence.

He was so far prepared for it that he was well acquainted with the district of Nimar, had largely mingled in kindly intercourse with the tribes inhabiting it while in the forest, and was perfectly familiar with their various dialects.

* At the Exhibition his time and attention were almost entirely absorbed by Krupp's machines and inventions, in the Prussian Department for Gun-nery, of which he wrote a critical account during his voyage, and sent it to the *Field*.

The Settlement occupied him for two years of arduous labour, and at the close he gave in to the Chief Commissioner a report, forming a volume of 356 pages, so full, elaborate, and exhaustive on the entire statistics of the district, as to call forth the highest eulogiums from the government.

In his Settlement Report, Capt. Forsyth dwells, more than he had previously done, on ethnical and historical details relative to the Aboriginal tribes, with whom he had come so largely in contact, in the course of his official labours. Previous to the subjugation of the Provinces in 1819, these tribes had been almost constantly in feud with each other, but subsequent to that event, under the firm and steady but mild repressing influence of British rule, they had gradually subsided into an orderly and law-abiding population, living in peace and harmony together, intermarrying and mingling freely with each other, and pursuing the cultivation of their lands, exposed only to the ravages of the wild elephant, buffalo, bison, and larger antelope, which wrought such havoc among their crops. As a people, they are so much intermixed, that the original distinctions of race are in a great degree effaced; but they are chiefly descended from those two great fountains of population in Eastern India, the Rajpoot and Hindu. Those of Rajpoot descent are much the nobler, and exhibit a higher type, equally in physique and intellect. They are met with chiefly among the Korkus and Bumahs; and the Rajpoot chiefs and land owners are boastful of their ancestry, assert a pre-eminence on that account, and are watchful over the purity of their blue blood. Their religions are not less mixed than their tribes; the Brahminical superstitions have largely obtained among them; but other forms of belief and worship retain their ground. In particular, the ancient spirit worship, which gives a special deity to every object in nature, to be worshipped by the simplest of ceremonies, such as that of bending the body, and propitiated by the simplest of oblations, such as the offering of an *onion*, while the spirit deity itself is represented by a splash of red paint on a rock or tree, or by any chance stone found in the way—this ancient worship still keeps its place, especially among the Gonds. Unhappily, their religions have no connection with the moral life; and greatly owing to this, it is abandoned to gross indulgencies, and especially to excess of intemperance in the use of an intoxicating drink distilled from the flowers of the Mhowa

tree, and supplied by traders who find their way among them during the harvest season. Under all their immorality of life, however, there lies the substratum of a mild and gentle nature, a tractable and docile disposition, a spirit of affectionate attachment to their benefactors, and of fidelity to their masters ; and in like manner under all their superstitious beliefs, there lie like encrusted rays of a purer light, and throughout their traditionary legends there pervade like a golden thread, the tenets of a more ancient and higher belief, derived possibly from a primeval revelation ; the tenet, namely, of one Supreme Being, the Creator of all things, invisible, possessed of power and dominion over all, not to be represented by any idol, nor approached by man, excepting through another and higher ; and the belief in a future life indicated in the worship of ancestors and of departed kindred. One cannot but recognise here an admirable groundwork for the operations of the judicious Christian missionary, in his dealings with the native mind with a view to its enlightenment. Let him but invest the Supreme One with moral attributes demanding holiness as He is holy ; let him impart to the native conception of mediation, the sacred import of the Christian doctrine in regard to it ; let him connect with the native idea of a future life, the ideas of accountability and retribution ; let him sanctify and Christianize these deeper beliefs in the native mind, and he will be furnished with a lever, powerful under God's grace, to elevate it above all debasing superstitions to the region of eternal truth, to inspire it with a nobler and purer faith, and to awaken in it a sense of moral obligation.

One such missionary my son met with, in the Rev. Stephen Hislop, stationed at Nagpore, the field of whose mission embraced the Gonds, in the district where my son's forest dwelling was situated. He formed a close friendship with Mr Hislop, and co-operated with him, so far as consistent and practicable, in his efforts for the enlightenment and improvement of the natives. Mr Hislop was not only faithful and earnest in his work,—yet judicious, cautious, and tentative in approaching the native mind as a minister of religion—but he was a man of high scientific and literary culture, eminent as a geologist and botanist, learned in the history of the Indian races and their religions and languages. He was held in the highest esteem by Sir Richard Temple, who, on his untimely death, paid a high compliment to his character

and erudition in a public document. He was unfortunately drowned, in the endeavour to cross a river while in flood. James lamented his loss, with a deep and sincere regret. He was, I believe, attached to the Free Church.*

On the termination of his duties as Settlement Officer, my son, became personal Assistant to the Chief Commissioner, afterwards obtaining the preferment of Assistant Commissioner 1st class, in 1870. While holding this preferment, he does not seem to have had any special official duties to discharge, but simply took part in the business of the general administration, for which he was well qualified by the large experience he had acquired, by his acquaintance with the general

*[The Rev. Stephen Hislop, whose worth and merits receive, as they deserve, this honourable testimonial, was my fellow-lodger and companion, while attending the Universities. His letters to me, of that period, would fill a volume; and they very much relate to our early scientific pursuits, botanical and geological, on which we often took counsel together. Mr Hislop was born at Dunse, 8th September, 1817. He was a distinguished student at both the Universities of Edinburgh and Glasgow. After the Disruption, he completed his studies at the New College; and was appointed a missionary to Nagpore, in 1844. An account of his arduous operations in the mission field has been put on record, in the Rev. Robert Hunter's "History of the Missions of the Free Church of Scotland in India and Africa," London, 1873. His tragic end occurred 4th September, 1863. In February, 1864, Professor Ramsay, in his presidential address to the Geological Society, gave an obituary notice of Mr Hislop. "There is," adds Mr Hunter, "a Nagpore mineral called Hislopite; several fossils have appended to them the specific name Hislopi, while one has Hislopianus; and if it were possible that the Church which sent the first Nagpore missionary forth should ever forget him, the geological world would not allow his name to die." His name is also recorded in *Hislopia lacustris* of Carter, a parasite on *Paludina Bengalensis*. In conjunction with the Rev. R. Hunter, Mr Hislop wrote memoirs on the geology of the Nagpore district, published in the "Quarterly Journal of the Geological Society," vols. x. and xi.; and on a visit to this country in 1860, an article "On the Tertiary Deposits associated with Trap-Rock in the East Indies, with a description of Fossil Shells," &c., which also appeared in the "Quarterly Journal of the Geological Society," May, 1860. A collection of his papers was published under the editorship of Sir Richard Temple. Mr Hislop's two other brothers, both natives of our district, may also be referred to as distinguished by their attainments in literature or science. His eldest brother, the late Rev. Alexander Hislop, of Arbroath, was the learned author of "The Two Babylons." His second brother, Mr Robert Hislop, is a well-known contributor on entomology to the Club's Proceedings; and occasionally honours our meetings by his presence.—J.H.]

and domestic history of the provinces, and by his familiarity with the languages employed in official transactions as well as in common converse. At this time, however, he felt his health again becoming impaired, and applied for the furlough of two years, to which his length of service entitled him. While negotiating for this, my alarming illness in July of that year, summoned him home without delay. He came off immediately, and arrived in the end of August. I had by that time considerably recovered, and was able to enjoy his society. Three months of the following winter were closely occupied in the composition of his work, "The Highlands of Central India." On the completion of it, he went to London, to arrange for its publication, and this being put in train, he returned home to enjoy more freely the society of his friends in Glasgow and Aberdeen. He had now resolved to return to India at the end of the first year of his furlough, and being anxious for the issue of his work previous to his departure, he again went to London, to expedite matters. While there, he was seized with a malignant attack of illness, which, in a very few days, had a fatal termination. He died on the 1st of May, 1871, in the thirty-third year of his age, and was interred in Kensal Green Cemetery. I shall not dwell on the sad event, neither will I attempt any delineation of his character, lest the warm affection I cherished for him, and the pride I had in my noble boy, should betray me into undue praise of him. His death has been the one deep sorrow of my latter years.

"Quis desiderio sit pudor, aut modus
Tam cari capitis."

Hor. ad Virg.

His book was published a few months after his death. It was a considerable time before I could bring my mind to read a work which had such melancholy associations connected with it. It had run the course of reviewing before I read it, and when I did I was gratified to find that it so well merited the commendations it had received. I was not prepared to give James credit for the talent and ability it displays; although I still consider that his report on Nimar exhibits higher ability on matters of greater moment, and greatly more difficult to cope with.

The work has now passed through two editions, and met with high appreciation and large demand in India, and among Anglo-Indian sportsmen; being essentially a work of Indian sport and

adventure, a companion in this respect to the author's early favourite, "The Old Forest Ranger."

It is at the same time so varied in its contents, so rich in descriptions of Indian scenery, it carries the reader among peoples and scenes, and incidents so novel and exciting, it is so full of pleasant bits of natural history, and all is told in a manner so agreeable and, at times, so elegant and graphic that it forms a work fitted to be no less attractive to general readers.

JAMES FORSYTH,

Aberdeen, November, 1876.

The following is a list of Capt. Forsyth's Published Works.

1. To Shetland in search of Sport.*
2. Stray Shots in India.*
3. Summer Sports in India.*
4. The Sporting Rifle and its Projectiles. 1st edition, 1862; second, 1867.
5. Report on "The Land Revenue Settlement of British Nimar," a district of the Central Provinces. Printed at Nagpore, 1870.
6. The Highlands of Central India: Notes on their Forests and Wild Tribes, Natural History, and Sports. 1st edition, 1871; second, 1872.

Besides the above, Captain Forsyth contributed several important papers to the *Gazetteer of Central India*, a work originated by Sir Richard Temple Rev. Mr Hislop, and himself. He was moreover a frequent writer in *The Field*, on subjects of Natural History and Sport, at first under the *nomme de plume* of "Black Buck."

* These appeared in *The Field*.

Notice of William P. Turnbull, LL.D., Author of "the Birds of East Lothian," &c. By ROBERT GRAY, F.R.S.E., F.S.A., Scot.

Dr Turnbull was born at Fala—a village lying on the south-east verge of Mid Lothian—on 20th June, 1830, and died at Philadelphia, on 5th July, 1871. He received part of his education at the High School of Edinburgh, and left this country for America, in 1850, when in his 21st year. His boyhood was spent in the village of Gladsmuir, East Lothian, and his father's residence being near the wood which bears the name of that village, the young bird-hunter had favourable opportunities for cultivating his taste for Natural History. He is described as being at that period "always engaged in catching birds and looking for their nests."

Between the years 1845 and 1850 he appears to have made many observations on bird life in his boyish rambles, the result of which he published after he had been some time in America, under the title of "Birds of East Lothian and a portion of the surrounding Counties." This work, which is a simple catalogue, bears no date, and was issued from the Caxton press of C. Sherman, Son, and Co., Philadelphia. In 1867, being in frequent correspondence with Dr Turnbull, I undertook, at his suggestion, the preparation of a new edition of this little work, which contains information on the rarer birds collected since the first edition was printed. It is illustrated by Mr William Sinclair, and was printed for private circulation—the number of copies being in 8vo., 150, and in 4to., 50. About a third of these having been destroyed by fire in the premises of the Glasgow publishers, copies of any kind must now be extremely rare. Two years later, namely in 1869, Dr Turnbull published another work in a similar style on the "Birds of East Pennsylvania and New Jersey;" which, though edited and printed in Glasgow, was issued in Philadelphia. There are two issues of this work; one, printed for private circulation, with lithographic illustrations, by Sinclair, Sheppard, and others; the other plain, and published by H. Grambo and Son.* It is now quoted by authors as a reference in connection with the districts which it illustrates, and

* Six copies of this issue have the name of C. J. Price, as publisher, on the title page.

has every where been received as a useful contribution to the ornithological literature of the author's adopted country.

Dr Turnbull was a great enthusiast in all matters relating to Wilson, the poet and American ornithologist. He had in his possession many deeply interesting memorials of that extraordinary man, consisting of the trunk containing the whole of his personal effects at the time of his death in 1813; his gun, pistols, books, letters, proof sheets, and plates of his great work on the birds of America, paint box, drawings, saddle, his will, portrait, and annotated copy of his poems—all of which he had left to a Miss Sarah Miller, who was pledged to become his wife, and from whose representatives they were purchased by Dr Turnbull, in 1868. Some of these articles are now in my possession—notably his portrait in its original frame; a drawing, cut out with his knife, to replace a figure on one of his plates; an unpublished letter addressed to Miss Miller, and a quantity of proof plates of his work.

Dr Turnbull visited this country in 1866, and I then had the pleasure of making his personal acquaintance. His visit was but short, but during our frequent interviews I could not help remarking that he was the most enthusiastic lover of birds I had ever met.

In August, 1868, the American University of Philadelphia conferred upon him the degree of LL.D., and about the close of that year he appears to have contemplated joining the publishing house of Henry Grambo & Son, Chesnut Street, Philadelphia, but failed to carry out the arrangement. He possessed a most valuable library of scientific works, and he frequently told me that he thought it included almost every work on Birds that had been published.

An obituary notice in an American newspaper thus concludes:—"Dr Turnbull was a warm hearted friend, a genial companion, a highly cultivated gentleman, a devoted father and husband, and a sympathizing honest man. His death, and at so early an age, will, in many places, create a void not likely very soon to be filled."

Notice of Captain James Laskey. By ROBERT GRAY,
F.R.S.E., F.S.A., Scot.

As a conchologist, Capt. Laskey's name is first mentioned in the 5th volume of Donovan's work on British Shells, in which the author acknowledges, in several instances, his obligations to "J. Laskey, Esq., of Crediton, Devonshire," for specimens which had been forwarded to him from the shores of that county. Some of these were figured by the author as he supposed for the first time. This was in the beginning of the present century. A few years later, Donovan's work being finished, Mr Laskey became the correspondent of Montagu, who was resident in the same county, and who published, between the years 1803 and 1813, two very important works on British Zoology, with their supplements, viz., the *Ornithological Dictionary* and the *Testacea Britannica*. In the supplement to the last named work, Montagu figured and published most of Laskey's discoveries.

Capt. Laskey came to reside in Dunbar about the year 1804. Very little is known of his previous history. He seems to have spent much of his time while here in gathering shells; indeed that pastime must have been his ruling passion; for although he was doubtless subjected to the usual gayeties and temptations of a soldier's life where his regiment—the 21st Militia—was stationed, and that at a time when perpetual rumours of invasion kept soldiers and civilians alike in suspense; he found time for a minute search of the sands and shingles from Belton to the borders of Berwickshire, and discovered in the course of a very few seasons upwards of forty different forms, which, as was then supposed, had not been described.

Captain Laskey was one of the original members of the Wernerian Natural History Society, which was instituted in 1808, and he appears to have been previously a fellow of the Linnæan Society. His first contribution to the Wernerian Memoirs was a paper on the *Pinna ingens* of Pennant. A second and more important communication to the same society was forwarded by him from Seton House, East Lothian, in January, 1809. In this paper, which is entitled "Account of North British Testacea," he gives a somewhat remarkable list of shells found on the shores of Dunbar, and enumerates no less than 44 new species—all of which, with one exception which was too late for publication,

had been recognised by Montagu and figured by him in his *Testacea Britannica*. Only a few of these, however, have survived; for although Montagu was satisfied of their supposed discovery, and the late Professor Fleming and others subsequently admitted them into their works, more recent investigations have shewn that a considerable number did not belong to this country at all, but had been brought from foreign parts—probably as ballast—and been ultimately cast up on the beach among the usual shore *rejectamenta* with native shells.

In 1813, while his regiment was stationed at Dumbarton Castle, Laskey published “A general Account of the Hunterian Museum of Glasgow, including historical and scientific notices of the various objects of art, literature, Natural History, anatomical preparations, antiquities, &c., in that celebrated collection.” In this work he gives a few interesting notes on some of the birds in the Museum. From this time I can trace nothing of his movements, or writings, if indeed he ventured on further publication. He shortly afterwards, as I am informed, mysteriously disappeared from Dunbar, leaving a wife and child* and all his shells and curiosities behind him. Nothing was heard of him for nearly twenty years, when about the year 1832, his wife, while walking on the beach with her brother, was astonished, on coming up to a person intently scrutinizing the shingle, to find her long-lost husband at his old employment of shell collecting. A few days afterwards, however, he disappeared as mysteriously as he had come, and after a lapse of some years his deserted wife heard of his death in indigent circumstances.

As already stated, Laskey’s discoveries did not stand the scrutiny of competent writers who took the trouble to investigate thoroughly into what previous authors had described. Of the forty-four so called new species only eight survive to the present

* A son who died in his 19th year. He was well known in the town as a daring lad, and an excellent swimmer. On one occasion after a north-easterly gale, a large black object, supposed by some persons on the look out to be the hull of a wrecked vessel, was seen drifting shorewards among the breakers. Young Laskey, who had joined the crowd, at once stripped and gallantly made his way out to the floating object, on the back of which he was shortly seen to scramble. This proved to be a huge Greenland whale, which, in less than half-an-hour, was triumphantly hauled on the beach with the reckless youth (who had all the while kept his seat) still on its back. The skeleton of this whale is, if I mistake not, still preserved in one of our public museums.

day. Upwards of twenty were found to be natives of the West Indies, or the shores of the Mediterranean. Several others are doubtful, and the remainder are referable to species known before. On this subject the following quotation may be given from Forbes and Hanley's *History of British Mollusca* :—

“It is not unimportant to remark, as accounting in some measure for the very considerable number of exotic shells introduced, from the neighbourhood of Dunbar by Mr Laskey, that several vessels from foreign ports had, just before that gentleman's investigations, visited his subsequent dredging ground, and their ballast was, in all probability, the fertile source of most of his additions to British Conchology, as it has in like manner added not a few spurious species to the Flora of the neighbouring district.”

[Capt. Laskey also wrote a paper on “Marine Shells found in the Line of the Ardrossan Canal.”—Mem. Wern. Soc. iv., p. 568.]

Note on the occurrence of the Velvet Scoter (Oidemia fusca) in Scotland, during the summer of 1876. By ROBERT GRAY, F.R.S.E., F.S.A., Scot.

On the 16th of June last I received a note from my friend, Mr. J. A. Harvie Brown, in which he informed me that he had, two days previously, seen two Velvet Scoters—a male and a female—swimming close to the shore near Bunessan, in Mull. The birds were very distinctly observed, being quite within gun range; and as they were evidently mated it seemed natural to conclude that they had remained in this country to breed. About a month later, however, namely, on the 20th July, while sailing from Leith to the Island of May, I was surprised on observing a flock of large black ducks rise from the water opposite Aberlady, and on finding that many of the birds were Velvet Scoters. These were readily recognised by the white patch on the wing. The flock consisted of about sixty birds, which I watched with considerable interest as they flew round the steamer in a series of swift and graceful curves. Several times they came quite close to the vessel and were then seen to be Scoters of

both sexes. I formed the impression that perhaps a third of the number might be *Common Scoters* (*Oidemia nigra*.)

Since making these observations I have been favoured by Mr Harvie Brown, with an additional note on the occurrence of these birds throughout the past summer, in St. Andrew's Bay. Writing on 31st July, his friend, Mr Cook, states that the Scoters had been increasing in numbers for about a month, and that there were then, and had been all the summer, four or five hundred in the bay. He had watched them regularly with a glass every morning, and had seen the flock, which consisted of "one or more species of Scoter, and many scamp ducks," passing repeatedly within a distance of 80 yards. Sixty of these ducks had been taken at one haul in the salmon stake nets, but had been all despatched to a distance before Mr Cook heard of the capture.

A few pairs of the Common Scoter have been known to breed in this country, but I am not aware of a single instance of the nesting of the Velvet Scoter. The occurrence during the past summer, therefore, of both species in such numbers is a fact of some interest to ornithologists; and I shall be glad to hear whether similar observations have been made by members of the Club in other localities.

ROBERT GRAY.

13, *Inverleith Row, Edinburgh*,
25th September, 1876.

List of Flowering Plants and Ferns observed in Selkirkshire. By the Rev. JAMES FARQUHARSON, M.A., Selkirk.
(Read at the Selkirk Meeting, June 28th, 1876.)

IN submitting to the members of the Club a list of Selkirkshire Flowering Plants and Ferns on the occasion of their first visit to the district, (their most westerly excursion up to this time), it may not be out of place to preface the list by a brief topographical sketch of the county.

Selkirkshire, or Ettrick Forest, consists mainly of the river-basins of the Ettrick and Yarrow. Towards the north it embraces also a section of the valley of the Tweed, that river for about eight miles flowing within the county, and for other two miles bounding it. The portion of the county north of the Tweed comprises part of the lower valley of the Gala, and the whole valley of the Caddon. Towards the east the county passes beyond the watershed of the Ettrick, and drops down on the upper waters of the Ale and Borthwick, tributaries of the Teviot, including within its boundaries small portions of their respective valleys. From the river-basin of the Yarrow, however, must be excluded that of its largest tributary, the Megget, which forms part of Peeblesshire.

The general form of the county is oblong, its longer axis following the direction of its chief streams, and running from S.W. to N.E. The outline in detail is most irregular, and it is difficult to imagine what has dictated its capricious course. On the N.W. it is dovetailed into Peeblesshire, and on the S.E. into Roxburghshire in a singularly intricate manner. The outline at these points has no relation to the natural features of the ground, and may have been determined by the boundaries of estates at the time when the limits of the county were first fixed.

Selkirkshire is one of the smaller Scottish counties. In length from the head of Ettrick to the junction of the Gala with the Tweed it is about 28 miles, and in breadth from Robertson to Blackhouse Heights, at the head of Douglas water, about 16 miles. The surface is broken in the extreme, and consists of alternate hill and valley, there being no table-land, nor indeed any level ground except the haughs along the river courses. The vales of Ettrick and Yarrow are divided from each other, and from the neighbouring valleys, by three ranges of

hills, which rise in height as one passes westward. The most easterly range, the high ground between the Ale and Borthwick, and the Ettrick—more interrupted by side valleys, and less distinctly in range than the other two—is surpassed in height and steepness by the hills between the Ettrick and the Yarrow; and these again do not equal the summits between the Yarrow and the Tweed, where may be found some of the highest ground in the south of Scotland. The first range averages, in its highest points, from 1200 to 1700 feet above sea-level; the second from 1500 to 1900; while west of the Yarrow many of the summits rise considerably above 2000 feet. These ranges are penetrated by innumerable narrow glens, each sending down its tributary burn to the river in the valley. Viewed from any of the heights near Selkirk, the glens and even the greater valleys are invisible. The “Forest,” stretching away to the south-west, presents the appearance of a billowy sea of hills, without habitation, and with but few traces of the handiwork of man. Hill rises beyond hill, and ridge beyond ridge, bare and treeless, for the most part tame in outline, and presenting none of those peaks and precipitous corries, which give grandeur to the scenery of the northern Highlands. But these tame, broad-featured, green hills, and their treeless upper valleys and glens, on a closer acquaintance, have a beauty and charm of their own. Wordsworth caught the spirit of the scene, and gave it expression in his “Yarrow Visited :”—

“Meek loveliness is round thee spread,
A softness still and holy;
The grace of forest charms decayed,
And pastoral melancholy.”

And when the traveller descends into the lower valleys, and follows their course, he will acknowledge that it needed not the romance of Border ballad and story, nor the genius of Sir Walter Scott, which has touched the whole land as with a magic wand, to make the district one of the most attractive in Scotland. The natural features of the scenery, and the woodland beauties which have been added in later years, combine to render the valleys of Ettrick Forest a joy to the lover of Nature, and to draw visitors in increasing numbers to the ancient hunting-ground of the Scottish kings, as a delightful field for the rambles of either tourist or naturalist.

The only considerable sheet of water in the county is St. Mary's Loch, near the head of the vale of Yarrow, and 800 feet above the sea. Flora does not add a leaf to the laurels of this famous lake; so far as I have examined them, its waters and shores are destitute of interesting plants. Nor is there much attraction for the botanist in the numerous small lochs distributed over the bleak moors, and among the featureless heights between the Ettrick and its neighbour valleys on the east. They lie in the most uninviting part of the county, and can scarcely be said to enliven its dreary surface.

The geological structure of Selkirkshire presents little variety; and no peculiar species of plants are owing to any peculiarity in the underlying rock. Throughout the whole district the rock is greywacke of the Lower Silurian series. For the most part it is destitute of fossils; but recently graptolites have been found in the slaty beds at various points. In a few places veins or dykes of felspathic porphyry occur; but they are of very limited extent. Along the present river-courses the soil is generally gravelly, occasionally loamy. Large masses of drift, which have been moulded into terraces by the action of the streams, are found at many points in the valleys. On the gentler slopes and in hollows there is often a good depth of soil of a strong clayey description; but on the hills, except where marshes exist and deposits of peat have been formed, the soil is thin, and has been formed by the disintegration of the not readily destructible rock underneath.

The climate of the county is severe. From the general elevation of the surface we should expect the winter temperature to be low; and accordingly the station of the Meteorological Society at Bowhill (595 ft.) has frequently furnished readings of the thermometer among the lowest recorded in Scotland. There is considerable variety in the rainfall of the county. The upper portion is very moist; but the rain-laden clouds coming up from the south-west get disburdened of their load among the heights, and the lower portion towards the north-east is, in consequence, comparatively a dry region. The district is exposed to gales from the S.W., which sweep unimpeded and with destructive force down the two long treeless valleys. The severity of the climate renders the county a late one for the purposes of arable farming; and, although there are a few sunny spots on the Tweed where grain ripens early, on an average the harvest is about a fortnight

later than that of the Lothians. Fortunately, from an agricultural point of view, the prosperity of Selkirkshire does not depend on the ripening of grain. By far the greater part of the county is pastoral, and devoted to the rearing of sheep. In the northern portion, indeed, containing the parishes of Galashiels, Caddonfoot, and Selkirk, where the altitude above the sea is least (Gala-foot, 300 ft., is the lowest point), there are several large and fine arable farms. But the valleys rise rapidly, and become more and more unfitted for the growth of cereals, until at Potburn, the highest farm in Ettrick, 1250 feet above the sea, oats never ripen, or rather have been known to ripen of late only in the very hot summer of 1868.*

Two considerations render the Flora of Selkirkshire especially interesting. The county is one of the few entirely inland Scottish counties; and at no part does it reach in altitude the region of Scottish alpine plants. The centre of the county is distant from the sea at Musselburgh about 30, at Berwick about 45, and at Annan about 38 miles; at the head of Caddon water, the point nearest the sea, the shore at Musselburgh is still 16 miles distant. Again, the highest summit is Ettrick Pen, 2269 feet in height, and not to be accounted as touching the region of alpine plants. Thus, devoid alike of marine plants, and of plants truly alpine in character, free also of many of those plants introduced by the hand of man, which have established themselves in the neighbourhood of large towns, and now obtain a place in Manuals of British Botany, the Flora of Ettrick Forest may be regarded as illustrating the average Flora of the

* In connection with the growth of cereals in the higher districts the following note is interesting. It was sent me some years ago by the Rev. Mr Falconer, of Ettrick. Ropelawshiel appears, from the Ordnance Map, to be about 1100 feet above the sea. "The shepherd at Ropelawshiel, after the potato disease appeared, sowed part of his ground with wheat, which came to full maturity. He sowed a bushel, minus a stone, of bearded wheat, and got back from the barley-mill 25 stones of flour. He sowed barley, but it did not do well; and oats which never ripened. The straw of the oats was very strong, 'strong as willows,' he said."

In Sept., 1867, Mr Falconer sent me as an average specimen of the crop then ripening on newly reclaimed ground on Ramsaycleugh Hill (800 ft.), a plant of oats, the produce of a single grain. It consisted of three very robust stems, 5½ ft. in height, bearing respectively 155, 91, and 90 grains,—346 grains of well-filled corn from one seed!

south of Scotland, and of that region which, lying between the alpine zone and the marine zone of Scottish plants, is indebted to neither of them for additions to the number of its species.

To show how little the Selkirkshire Flora can claim to count alpine plants among its species, notwithstanding the hilly and even mountainous character of most of the district, I copy the following from my note-book under date August 17th, 1866:—
 “Summit of Ettrick Pen. A dense close sward, kept down by sheep, composed chiefly of *Festuca ovina*, *Galium saxatile*, *Vaccinium Myrtillus*, *Trichostomum lanuginosum*, (?) with patches of *Luzula sylvatica*, and *Juncus squarrosus*. Also more sparingly *Carex pilulifera*, *Potentilla Tormentilla*, *Vaccinium Vitis Idæa*, *Anthoxanthum odoratum*.” On the slopes near the summit *Nardus stricta* and *Festuca ovina*, often in its viviparous form, were the prevalent grasses. *Luzula sylvatica* covered large spaces, and *Carex glauca* was abundant. The only plants giving an alpine aspect to the vegetation of this, the highest ground in the county, were *Saxifraga stellaris*, which grows sparingly along Entertrona Burn; and *Cryptogramma crispa* and *Lycopodium alpinum*, found in rough ground on the ridge of the hill.

On August 15th, 1866, the only plant of a semi-alpine type, I find noted as growing on the summit of Ward Law, in Ettrick (1951 ft.), is *Rubus Chamæmorus*.

True alpine vegetation is thus wanting, even on the highest Selkirkshire range, although a few miles to the west, in Dumfriesshire on the precipitous mountains around Loch Skene, which are between 2600 and 2700 feet in height, the following alpine species are abundant:—*Saxifraga hypnoides* and *oppositifolia*, *Oxyria reniformis*, *Sedum Rhodiola*, *Thalictrum alpinum*, *Epilobium alpinum*, *Salix herbacea*, *Asplenium viride*, &c.

In searching for Flowering Plants and Ferns (I have paid little attention to Mosses, Lichens, and Fungi, and do not profess to treat of them in this paper), I have not found the most productive field on the slopes and summits of the bare and smooth hills, nor in the grassy and solitary side glens, nor even on the margins of lochs, often so fertile in good plants elsewhere. The banks of the rivers, the gravelly and bushy haughs along their courses, and the woods and enclosed ground of the lower part of the county have furnished the most interesting, as well as the most numerous species in the following list. I offer the list to the

Club, and ask for it a place in their Transactions, not on the assumption that it is complete,† but in the hope that it may be the foundation of a County Flora, which others will lend their aid to perfect. In the Galashiels district, for instance, I have botanized very little, and plants must be forthcoming from that quarter to add to the number now recorded; and that without reckoning the foreigners which have got a precarious hold on the shores of the Gala, their seeds having been first washed from the foreign fleeces scoured in the woollen factories and skin-works of Galashiels, and then carried by the polluted waters of the stream to the gravel-beds at its mouth.

Incomplete, then, as the following list is, I trust it will interest the botanical members of the Club. To some of them it may appear worth completing, and from the note at the end it will be seen that our indefatigable member, Mr Brotherston, of Kelso, has set an example in this direction.

† I have not, for example, found the following species within the county, although one might say they *should* be there, and I expect yet to find them:—

Ranunculus sceleratus.	Convolvulus arvensis.
Papaver Rhoeas.	Stachys arvensis.
—— Argemone.	Anagallis arvensis.
Lychnis Githago.	Atriplex patula.
Stellaria glauca.	Polygonum viviparum.
Cerastium semidecandrum.	Rumex conglomeratus.
Radiola millegrana.	Salix pentandra.
Genista Anglica.	Habenaria albida.
Sedum Telephium.	Sparganium simplex.
—— acre.	Juncus supinus.
Helosciadium inundatum.	Scirpus fluitans.
Valerianella olitoria.	Catabrosa aquatica.
Centaurea Cyanus.	Hordeum murinum.
Chrysanthemum segetum.	

List of Flowering Plants and Ferns.

NOTE.—The nomenclature adopted is that of “The London Catalogue of British Plants,” 7th edition, 1874. I have, however, retained the old names of a few species, as given in “Hooker and Arnott’s British Flora,” 6th edition, 1850, having been unable, with the means at my disposal, to determine which of the species in the London Catalogue correspond with the

plants found here, and known to me under the following names :—*Ranunculus aquatilis*, *Fumaria capreolata*, *Rubus fruticosus*, *Rosa villosa*, *Arctium Lappa*, *Sparganium natans*, *Festuca bromoides*.

All the species here recorded I have gathered myself, except *Arabis Turrita*, *Viburnum Opulus* and *Juniperus communis*; so that I am responsible for the accuracy of the list. Mr Brotherston vouches for those which appear under his name at the end. For a knowledge of some of the localities of our rarer plants, I have been indebted to my friends, Mr Mathison, Bowhill Gardens; Mr James Mathison; Mr Scott, Selkirk Grammar School, and his son, Mr Alex. Scott, Assistant to Prof. Dewar, Cambridge; and Mr Thomas Welsh, mill-foreman, Selkirk, a zealous student of our local ferns.

Italics indicate species which are, without doubt, not indigenous.

<i>Thalictrum minus</i> .	<i>Cochlearia officinalis</i> .
<i>Anemone nemorosa</i> .	<i>Draba verna</i> .
<i>Ranunculus aquatilis</i> .	<i>Thlaspi arvense</i> .
„ <i>hederaceus</i> .	<i>Iberis amara</i> .
„ <i>Flammula</i> .	<i>Teesdalia nudicaulis</i> .
„ <i>Lingua</i> .	<i>Capsella Bursa-pastoris</i> .
„ <i>auricomus</i> .	<i>Lepidium Smithii</i> .
„ <i>acris</i> .	<i>Reseda Luteola</i> .
„ <i>repens</i> .	<i>Helianthemum vulgare</i> .
„ <i>bulbosus</i> .	<i>Viola palustris</i> .
„ <i>Ficaria</i> .	„ <i>canina</i> .
<i>Caltha palustris</i> .	„ <i>tricolor</i> .
<i>Trollius Europæus</i> .	„ „ <i>b. arvensis</i> .
<i>Aquilegia vulgaris</i> .	„ <i>lutea</i> .
<i>Nymphæa alba</i> .	„ „ <i>b. amoena</i> .
<i>Nuphar lutea</i> .	<i>Drosera rotundifolia</i> .
<i>Papaver dubium</i> .	<i>Polygala vulgaris</i> .
<i>Fumaria officinalis</i> .	<i>Silene inflata</i> .
„ <i>capreolata</i> .	<i>Lychnis vespertina</i> .
<i>Raphanus Raphanistrum</i> .	„ <i>diurna</i> .
<i>Sinapis arvensis</i> .	„ <i>Flos-Cuculi</i> .
„ <i>alba</i> .	<i>Cerastium glomeratum</i> .
<i>Sisymbrium officinale</i> .	„ <i>triviale</i> .
„ <i>Alliaria</i> .	„ <i>arvense</i> .
<i>Cardamine amara</i> .	<i>Stellaria nemorum</i> .
„ <i>pratensis</i> .	„ <i>media</i> .
„ <i>hirsuta</i> .	„ <i>Holostea</i> .
<i>Arabis thaliana</i> .	„ <i>graminea</i> .
„ <i>Turrita</i> . ¹	„ <i>uliginosa</i> .
„ <i>hirsuta</i> .	<i>Arenaria trinervis</i> .
<i>Barbarea vulgaris</i> .	„ <i>serpyllifolia</i> .
<i>Nasturtium officinale</i> .	<i>Sagina procumbens</i> .

¹ Found on an old wall at Haining Garden by Mr A. H. Borthwick, Melrose, in April, 1874, as recorded in the Transactions of the Club for that year, p. 273.

Sagina nodosa.	Rubus fruticosus.
Spergula arvensis.	„ saxatilis.
Scleranthus annuus.	„ Chamæmorus.
Montia fontana.	Geum urbanum.
Hypericum perforatum.	„ rivale.
„ tetrapterum.	Rosa spinosissima.
„ humifusum.	„ villosa.
„ pulchrum.	„ tomentosa.
„ hirsutum.	„ rubiginosa.
<i>Malva moschata.</i>	„ canina.
Linum catharticum.	Cratægus Oxyacantha.
Geranium sylvaticum.	Pyrus Aucuparia.
„ pratense.	„ Malus.
„ molle.	Peplis Portula.
„ dissectum.	Epilobium angustifolium.
„ Robertianum.	„ hirsutum.
Oxalis Acetosella.	„ parviflorum.
Impatiens Noli-me-tangere.	„ montanum.
Ilex Aquifolium.	„ tetragonum.
Ulex Europæus.	„ palustre.
Sarothamnus scoparius.	Circæa Lutetiana.
Ononis arvensis.	Myriophyllum spicatum.
Anthyllis vulneraria	Hippuris vulgaris.
Medicago lupulina.	Callitriche verna.
Trifolium pratense.	Sedum villosum.
„ medium.	Saxifraga stellaris.
„ arvense.	„ granulata.
„ repens.	Chrysosplenium oppositifolium.
„ procumbens.	Parnassia palustris.
„ minus.	Hydrocotyle vulgaris.
Lotus corniculatus.	Sanicula Europæa.
„ major.	Ægopodium Podagraria.
Vicia hirsuta.	Bunium flexuosum.
„ Cracca.	Pimpinella Saxifraga.
„ sylvatica.	Æthusa Cynapium.
„ sepium.	Angelica sylvestris.
„ sativa.	Heracleum Sphondylium.
Lathyrus pratensis.	Daucus Carota.
Orobis tuberosus.	Torilis Anthriscus.
Prunus spinosa.	Chærophyllum sylvestre.
„ Avium.	„ temulum.
Spiræa Ulmaria.	<i>Myrrhis odorata.</i>
Agrimonia Eupatoria.	Conium maculatum.
Sanguisorba officinalis.	Hedera Helix.
Alchemilla arvensis.	Adoxa moschatellina.
„ vulgaris.	Sambucus nigra.
Potentilla Fragariastrum.	Viburnum Opulus. ²
„ Tormentilla.	Lonicera Periclymenum.
„ reptans.	Galium cruciatum.
„ anserina.	„ verum.
Comarum palustre.	„ saxatile.
Fragaria vesca.	„ palustre.
Rubus Idæus.	„ „ c. Witheringii.

² Observed at Foulshiels by Mr Hardy, during excursion of the Club.

Galium uliginosum.
 „ *Aparine.*
Asperula odorata.
Sherardia arvensis.
Valeriana dioica.
 „ *officinalis.*
 „ *Pyrenaica.*
Scabiosa succisa.
 „ *arvensis.*
Carduus nutans.
 „ *crispus.*
 „ *lanceolatus.*
 „ *palustris.*
 „ *heterophyllus.*
 „ *arvensis.*
Arctium Lappa.
Centaurea nigra.
Chrysanthemum Leucanthemum.
Matricaria inodora.
 „ *Parthenium.*
Anthemis nobilis.
Achillea Millefolium.
 „ *Ptarmica.*
Artemisia vulgaris.
Filago Germanica.
 „ *minima.*
Gnaphalium uliginosum.
 „ *sylvaticum.*
 „ *dioicum.*
Senecio vulgaris.
 „ *sylvaticus.*
 „ *viscosus.*
 „ *Jacobæa.*
 „ *aquaticus.*
Doronicum Pardalianches.
Bellis perennis.
Solidago virgaurea.
Tussilago Farfara.
Petasites vulgaris.
Lapsana communis.
Hypochoeris radicata.
Leontodon hispidus.
 „ *autumnalis.*
Taraxacum officinale.
Sonchus oleraceus.
 „ *arvensis.*
Crepis virens.
 „ *paludosa.*
Hieracium Pilosella.
 „ *aurantiacum.*
 „ *collinum.*³

Hieracium murorum.
 „ *vulgatum.*
 „ *prenanthoides.*
 „ *boreale.*
Campanula latifolia.
 „ *rotundifolia.*
Vaccinium Vitis Idæa.
 „ *Myrtillus.*
Erica Tetralix.
 „ *cinerea.*
Calluna vulgaris.
Pyrola minor.
Fraxinus excelsior.
Gentiana campestris.
Menyanthes trifoliata.
Scrophularia nodosa.
Digitalis purpurea.
Linaria vulgaris.
Mimulus luteus.
Veronica hederifolia.
 „ *agrestis.*
 „ *arvensis.*
 „ *serpyllifolia.*
 „ *officinalis.*
 „ *Chamædrys.*
 „ *montana.*
 „ *scutellata.*
 „ *Anagallis.*
 „ *Beccabunga.*
Euphrasia officinalis.
Bartsia Odontites.
Pedicularis palustris.
 „ *sylvatica.*
Rhinanthus Crista-Galli.
Melampyrum pratense.
Lathræa squamaria.
Mentha piperita.
 „ *hirsuta.*
 „ *arvensis.*
Thymus Serpyllum.
Origanum vulgare.
Calamintha Clinopodium.
Nepeta Glechoma.
Prunella vulgaris.
Scutellaria galericulata.
Stachys palustris.
 „ *sylvatica.*
Galeopsis versicolor.
 „ *Tetrahit.*
Lamium amplexicaule.
 „ *purpureum.*

³ An account of the discovery of this plant during an excursion to Selkirk, made by Professor Balfour with his Class, 27th June, 1868, and a description of the species, with synonyms, will be found in the Transactions of the Edinburgh Bot. Society, vol. x., part i., p. 17. It is probably the long lost *H. dubium* of Smith's "English Flora."

Lamium album.
Ajuga reptans.
Teucrium Scorodonia.
Myosotis cæspitosa.
 " *palustris.*
 " *repens.*
 " *sylvatica.*
 " *arvensis.*
 " *versicolor.*
Anchusa arvensis.
 " *sempervirens.*
Symphytum officinale.
 " *tuberosum.*
Pinguicula vulgaris.
Utricularia vulgaris.
Primula vulgaris.
Trientalis Europæa.
Lysimachia Nummularia.
 " *nemorum.*
Plantago major.
 " *media.*
 " *lanceolata.*
Littorella lacustris.
Chenopodium album.
 " *Bonus Henricus.*
Rumex obtusifolius.
 " *crispus.*
 " *aquaticus.*
 " *Acetosa.*
 " *Acetosella.*
Polygonum Convolvulus.
 " *aviculare.*
 " *Hydropiper.*
 " *Persicaria.*
 " *amphibium.*
 " *Bistorta.*
Empetrum nigrum.
Euphorbia Helioscopia.
 " *Peplus.*
Mercurialis perennis.
Urtica dioica.
 " *urens.*
Quercus Robur.
Corylus Avellana.
Alnus glutinosa.
Betula alba.
Myrica Gale.
Populus tremula.
Salix Rus elliana.
 " *alba.*
 " *purpurea.*
 " *Helix.*
 " *cinerea.*
 " *repens.*
Juniperus communis ⁴

Typha latifolia.
Sparganium ramosum.
 " *natans.*
Arum maculatum.
Lemna minor.
Potamogeton natans.
 " *heterophyllus.*
 " *lucens.*
 " *crispus.*
 " *obtusifolius.*
 " *pusillus.*
Triglochin palustre.
Alisma Plantago.
Orchis mascula.
 " *latifolia.*
 " *maculata.*
Gymnadenia conopsea.
Habenaria viridis.
 " *chlorantha.*
Listera cordata.
 " *ovata.*
Neottia Nidus-Avis.
Iris Pseudacorus.
Scilla nutans.
Allium vineale.
 " *ursinum.*
Narthecium ossifragum.
Luzula pilosa.
 " *sylvatica.*
 " *campestris.*
 " *multiflora.*
Juncus conglomeratus.
 " *effusus.*
 " *glaucus.*
 " *acutiflorus.*
 " *lamprocarpus.*
 " *bufonius.*
 " *squarrosus.*
Blysmus compressus
Scirpus palustris.
 " *multicaulis.*
 " *cæspitosus.*
 " *setaceus.*
 " *lacustris.*
 " *sylvaticus.*
Eriophorum vaginatum.
 " *angustifolium.*
Carex dioica.
 " *pulicaris.*
 " *disticha.*
 " *teretiuscula.*
 " *paniculata.*
 " *muricata.*
 " *stellulata.*
 " *remota.*

⁴ Reported found in the county by Mr Smail, Galashiels

Carex curta.
 „ *ovalis.*
 „ *vulgaris.*
 „ *glauca.*
 „ *pilulifera.*
 „ *præcox.*
 „ *pallescens.*
 „ *panicea.*
 „ *sylvatica.*
 „ *lævigata.*
 „ *binervis.*
 „ *fulva.*
 „ *flava.*
 „ *hirta.*
 „ *paludosa.*
 „ *ampullacea.*
 „ *vesicaria.*
Anthoxanthum odoratum.
Digraphis arundinacea.
Alopecurus geniculatus.
 „ *pratensis.*
Phleum pratense.
Agrostis vulgaris.
Phragmites communis.
Aira cæspitosa.
 „ *flexuosa.*
 „ *caryophyllea.*
 „ *præcox.*
Avena flavescens.
 „ *pratensis.*
 „ *elatior.*
Holcus mollis.
 „ *lanatus.*
Triodia decumbens.
Koeleria cristata.
Molinia cærulea.
Melica uniflora.
Glyceria fluitans.
Poa annua.
 „ *nemoralis.*
 „ *pratensis.*
 „ *trivialis.*
Briza media.
Cynosurus cristatus.

Dactylis glomerata.
Festuca bromioides.
 „ *ovina.*
 „ *duriuscula.*
 „ *elatior.*
 „ *pratensis.*
Bromus giganteus.
 „ *asper.*
 „ *sterilis.*
 „ *commutatus.*
 „ *mollis.*
Brachypodium sylvaticum.
Triticum caninum.
 „ *repens.*
Lolium perenne.
Nardus stricta.
Pteris aquilina.
Cryptogramma crispa.
Lomaria Spicant.
Asplenium Ruta-muraria.
 „ *Trichomanes.*
 „ *Adiantum-nigrum.*
Athyrium Filix-fœmina.
Scolopendrium vulgare.
Cystopteris fragilis.
Aspidium aculeatum.
 „ „ *b. lobatum.*
Nephrodium Filix-mas.
 „ *spinulosum.*
 „ *Oreopteris.*
Polypodium vulgare.
 „ *Phegopteris.*
 „ *Dryopteris.*
Ophioglossum vulgatum.
Botrychium Lunaria.
Lycopodium clavatum.
 „ *alpinum.*
 „ *Selago.*
Selaginella Selaginoides.
Equisetum arvense.
 „ *sylvaticum.*
 „ *palustre.*
 „ *limosum.*

The following species have either been communicated to me by Mr Brotherston, or published by him in the papers of the “Botanical Locality Record Club,” as growing within the limits of Selkirkshire:—

Hieracium crocatum.
Myosotis collina.
Salix pentandra.
 „ *decipiens.*
 „ *Lambertiana.*
 „ *rubra.*
 „ *viminalis.*
 „ *aurita.*

Salix caprea.
 „ *Weigeliana.*
Potamogeton perfoliatus.
Orchis incarnata.
Luzula congesta.
Carex aquatilis.
Agrostis canina.

88. *On the Leafing of certain Trees*, by Rev. J. Farquharson

Number of native species recorded in List now given	-	453
„ species certainly introduced, now naturalised		16
„ observed by Mr Brotherston	-	15

Total Selkirkshire Flowering Plants and Ferns - 484

The Mosses and Lichens of the county are well worth observing. That rarities are in store for sharp eyes was proved by the exhibition, at the Selkirk meeting of the Club, of fine specimens of *Buxbaumia aphylla*, found a few days before on Foulshiels Hill, near the town, by Mr James Noble, cabinet-maker, Selkirk, an enthusiastic local botanist.

Note on the Leafing, &c., of certain Trees. By the Rev. J. FARQUHARSON, M.A., Selkirk.

SINCE the year 1861, I have marked the dates at which a few trees around the Manse respectively show their first expanded leaves or flowers. The number of species is small; but as the observations have been made with care, and always with reference to the same individual trees, the dates, which I now bring together from a series of miscellaneous garden notes, may have some interest in themselves, and also as affording a few data by which to compare our upland climate with that of the lower and sea-side regions visited by the Club.

The Plane (*Acer Pseudo-platanus*), which has been the subject of observation, is in a very exposed situation, but does not seem to fall behind its fellows on that account. Its first tender leaves are always seen at the same spot, in a hollow among the branches towards the top of the tree, and on the side sheltered from our violent S.W. winds.

The Maple (*Acer platanoides*) is also very much exposed, and I fear may not long afford a subject of observation. Its limbs, more brittle than those of the Plane, have yielded to successive gales, until now it has lost about a third of the bulk it possessed in 1861. It is the *flowering* of this species I have noted—not the bursting of the flower-clusters from the enclosing scales, but the first opening of individual flowers in the clusters. Sometimes the general flower-bud is open two or three days before the separate flowers expand.

The Lime (*Tilia Europæa*) is one of a row of young trees planted in 1858, which come into leaf sometimes a week before the older trees of the same species growing about the Manse. I have given the date of leafing, not from the time when the first fringe of green is seen projecting beyond the scale of the bud, but from the first real opening of the bud. In certain cold and dry seasons the Lime does not burst, but rather crawls into leaf, an interval of several days elapsing between the first appearance of green, and the true expansion of the bud; but it is possible, notwithstanding this indeterminateness, to fix the date of true expansion.

	1861.	1862.	1863.	1864.	1865.		
Plane (leafing), April	19	25	10	18	20		
Maple (flowering), do.	21	21	4	20	21		
Lime (leafing), do.	22	29	17	27	26		
	1866.	1867.	1868.	1869.	1870.	1871.	1872.
Plane, April 27	17	15	18	19	3	15	
Maple, April 23	20	6	14	18	12	8	
Lime, May 9	May 4	Ap. 19	25	21	May 5	Ap. 25	
		1873.	1874.	1875.	1876.		
Plane, April		18	13	16	24		
Maple, April		19	10	18	24		
Lime, April		30	21	27	May 6		

It will be seen that the leafing and flowering of the three trees have had the following range :—

Plane, April 3rd to 27th	- 24 days.
Maple, April 4th to 24th	- 20 „
Lime, April 17th to May 9th	- 22 „

The Lime is always last; but, while in eight of the years the Plane is seen to leaf before the Maple flowers, in the other eight the Maple has the advantage of the Plane; and when the Maple wins the race, it generally wins by a longer space than the Plane can show in its successful years. To explain these differences a meteorological register would require to be set alongside the dates now given; but it appears to me that the Plane, the hardier tree of the two, is less influenced by fine weather in its date of leafing than the Maple is by the same cause in its flowering, the latter responding with promptness to the call of a mild and sunny spring, and shooting ahead of its competitor. I come to this conclusion notwithstanding the Plane's early date in 1871. The other years seem to justify it.

The years 1863 and 1866 are shown by the evidence of the three trees to have had respectively the earliest and the latest spring seasons ; and this year, 1876, is little in advance of 1866.

The years 1861 and 1870 show the three approaching each other most closely. It will be remembered that the winters at the commencement of these years were exceptionally severe, while the springs were of average character. In 1871, on the other hand, which also began in a very severe winter, the spring was marked by great and sudden changes, having been unusually genial and summer-like at first, but closing with a long continuance of very backward weather, cold and wet, in the end of April. Accordingly, that year shows the greatest departure from the average of the above dates, the Plane having its earliest, April 3rd, and the Lime one of its latest dates, May 5th—an interval of 32 days, while the average interval of the other 15 years is $8\frac{4}{5}$ days. It is plainly the immediate weather, the weather at the time of leafing or flowering, that determines the dates of these phenomena. A severe winter is compensated for by a mild and bright latter part of spring ; while any apparent advantage gained from a mild February or March is lost should April and early May prove unpropitious.

LOCAL DOCUMENTS.

This is intended as an example of what might become a series of useful articles of general interest, to which Members of the Club might lend assistance, for the preservation of valuable papers elucidative of local history, which may be of sufficient importance to be put in print. Possibly several of the grievous blanks and meagre outlines in documentary evidence respecting Border events, family chronicles, and topographical details, might be supplied from private sources, or neglected manuscripts; if encouragement was given for their production, and for their being carefully edited. In the meantime, as a commencement, I avail myself of the transcripts, kindly placed at my disposal by three of our members, of the unpublished documents which follow

J. H.

I. DUNSE.

Copy of the Charter of King James IV., erecting the Town of Dunse into a Burgh of Barony, Feb. 23rd, 1489. (Communicated by Mr CHARLES WATSON).

JACOBUS Dei gratia Rex Scotorum, omnibus probis hominibus suis totius terre sui, clericis et laicis, ad quos presentes literes pervenerint, Salutem : Sciatis quod cum avisamento dominorum nostri Concilii pro singulari favore, quem gerimus erga dilectos familiares armigeros nostros Georgium Hume de Aytoun, et Johannem Hume suum filium et heredem apparentem, ac pro bono, fideli, et gratuito servitio nobis per eosdem impenso, infeodavimus, creavimus, et fecimus, ac tenore presentis carte nostre infeodamus, creamus, et facimus villam de Duns cum pertinenciis, jacentem infra vice-comitatum nostrum de Berwick, liberum burgum in baronia pro perpetuo; quam villam ac etiam terras de Duns cum pertinenciis dicti Georgius et Johannes hereditarie habent per cartas quondam Serenissimi Patris nostri cujus anime propitiatur Deus desuper confectas Concessimus etiam ac tenore presentis carte nostre concedimus inhabitantibus dictum burgum et imposterum inhabituris, plenam potestatem et liberam facultatem emendi et vendendi in ipso burgo, vina, ceram, pannum, laneum et lineum latum et strictum, aliàque mercimonia, cumque potestate et libertate habendi et tenendi pistores, brasiatores, carnifices, et tam carniū quam piscium macellarios, aliosque artium operarios ad libertatem burgi in baronia spectantes, seu qualitercunque spectare valentes in futurum.—Concessimus, ac tenore presentis carte nostre concedimus, ut in dicto burgo sint burgenses. Et quod idem potestatem habeant futuris temporibus eligendi ballivos et alios efficarios pro gubernatione ejusdem burgi necessarios, nec non concessimus et tenore presentis carte nostre concedimus burgensibus et inhabitantibus dictum burgum, ut in ipso burgo, habeant,

teneant, et possediant pro perpetuo, crucem et forum, singulis ebdomadis, die Mercurii: et nundinas publicas, singulis annis in perpetuum, die Lune proximo et immediate sequente festum Sancte Trinitatis post Penthecostem, et per octavas ejusdem, cum omnibus theoloneis et aliis libertatibus ad hujusmodi nundinas spectantibus seu spectare valentibus in futurum. Tenendum et habendum prefatam villam de Duns cum pertinentiis, perpetuis futuris temporibus, in merum et liberum burgum in baronia, cum dictis privilegiis, libertatibus, et concessionibus, ac universis aliis libertatibus, proficuis, commoditatibus, asiamentis, ac justis pertinentiis suis quibuscunque, tam non nominatis quam nominatis, ad burgum in baronia spectantibus, seu juste spectare valentibus in futurum. Et adeo libere, quiete, plenarie, integre, honorifice, bene, et in pace, in omnibus et per omnia, sicut aliquis burgus in baronia in regno nostro quibuscunque temporibus retroactis liberius infeodatur seu tenetur, sine revocatione quacunque quovis modo inde faciendo in futurum. Strictius inhibens ne quis in contrarium premissorum aliquid devenere presumat, sub omni pena que competere poterit in hac partè. In cujus rei testimonium presenti carte nostre magnum sigillum nostrum apponi precipimus. Testibus; Reverendis in Christo patribus Roberto Episcopo Glasguense, Willielmo Episcopo Aberdonense; Dilectis consanguineis nostris, David Duce de Montrose, Comite de Crawfordie; Colino Comite de Ergile, Domino Campbell et Lorne, Cancellario nostro; Patricio Comite de Boithvile, Domino Halys, magistro hospicii nostri; Johanne Domino Glammys, Johanne Domino Drummond, justiciariis nostris; Alexandro Hume de Eodem, magno camerario nostro; venerabili in Christo patre Johanne priore Sancti Andree, nostri secreti Sigilli custode; Andrea Domino Gray; Laurentio [Domino] Oliphant; Willielmo Domino Sancti Johannis thesaurario nostro; et dilectis clericis nostris, magistris Ricardo Murhede decano Glasguense, nostrorum Rotulorum et registri ac concilii, clerico; et Archibaldo Quhitelaw, subdecano Glasguense, secretario nostro: Apud Edinburgh, vicesimo tertio mensis Februarii, anno Domini, millesimo quadrigentesimo, octuagesimo nono, et regni nostri secundo.

TRANSLATION.

JAMES, by the grace of God King of Scots; To all worthy men in the whole land whether clergy or laity, to whom these present writings shall come, Greeting: Know; that with advice of the Lords of our Council, for the special favour we bear to our beloved household esquires George Hume of Aytoun, and John Hume his son and apparent heir, and for the good, faithful, and voluntary services they have done us, We have ordained, appointed, and constituted, as by the tenor of our present charter we do ordain, appoint, and constitute the Town of Duns with the pertinents thereto belonging, lying within our Sheriffdom of Berwick, a free Burgh of Barony for ever; which Town and also the lands of Duns, with the pertinents heritably belong to the said George and John, by completed charters of our late most serene Father, on whose soul may God have mercy. We have granted likewise, and by the tenor of this our present charter, we do grant to the Inhabitants of the said Burgh, and to the indwellers in time coming, full power and liberty to buy and sell in this Burgh, wines, wax, woollen and linen cloth,

broad and narrow, and other goods ; with power and liberty of having and keeping Baxters, Maltsters, Butchers, and Victuallers both of flesh and fish, and the other artificers belonging to the liberty of a Burgh of Barony, or whatsoever manner may belong for the future. We have granted, and by the tenor of this our present charter we do grant, that in the said Burgh there be Burgesses ; and that the same have power in time coming to elect Bailies and other Officers necessary for governing the same Burgh ; and also we have granted, and by the tenor of this our present charter do grant to the Burgesses and Inhabitants of the said Burgh, that in the said Burgh they shall have, hold, and possess continually Cross and Market every week on Wednesday, and a public Fair yearly for ever on the Monday next and immediately following the feast of the Holy Trinity after Whitsunday, and that for eight days, with all tolls [or customs] and other liberties belonging to such a fair, or may belong for the future. To be holden and kept the said Town of Duns with the pertinents thereto belonging, constituted into a pure and free Burgh of Barony perpetually for times coming, with the said privileges, liberties, and grants, and all other liberties, incomes, profits, and emoluments, and their just pertinents whatsoever, as well not named as named, belonging to a Burgh of Barony, or justly may belong for the future. And so freely, quietly, fully, entirely, honourably, well, and peaceably in all things, and through all things, as any Burgh of Barony in our kingdom in all times past is freely constituted and holden, without reversion whatsoever any manner of way henceforth to be done for the future : Strictly discharging that none presume in any manner of way, to contravene the premises, under all penalty which shall be competent in this part. In Testimony whereof, we order and command this our great seal to be affixed to the present charter. Witnesses : the Reverend Fathers in Christ, Robert, Bishop of Glasgow ; William, Bishop of Aberdeen ; our beloved Cousins, David, Duke of Montrose, Earl of Crawford ; Colin, Earl of Ergile, Lord Campbell and Lorne, our Chancellor ; Patrick, Earl of Boithvile, Lord Halys, Master of the Household ; John, Lord Glammys, John Lord Drummond, our Justiciaries ; Alexander Hume of that Ilk, our Great Chamberlain ; the Rev. Father in Christ, John Prior of St. Andrews, keeper of the Priory Seal ; Andrew, Lord Gray ; Laurence, Lord Oliphant ; William, Lord St. John, our Treasurer ; and our beloved Clerks, Mr Richard Murhede, Dean of Glasgow, Clerk of our Accounts, and of Register and of Council ; and Archibald Quhitelaw, Subdean of Glasgow, our Secretary. At Edinburgh, the 23rd day of February, 1489, and of our reign the second year.

Obs. To this deed the following memorandum is attached :—"When Miss Lorain left Dunse, she gave me a trunk of old papers, which had belonged to Mr Winram and her Father, who had been Sheriff Clerk of Berwickshire, from 1700 to 1785. In this trunk I found the original Charter by King James the Fourth, dated in 1489, in favour of the Humes of Ayton, then proprietors of Dunse ; and I now return it to Mr Hay, to whom it properly belongs. A copy and translation are also sent.—JA. WATSON, Dunse, June 1, 1868."

The translation has been revised; and some words in the copy of the original deed have been corrected. George Home, son of Sir Alexander Home, of Home and Dunglass, obtained a charter of the greater part of the lands of Ayton, with those of Whitfield, of date 29th November, 1472. (Carr's Hist. of Coldingham, p. 125.) He may have been the George Home, who, in 1442, negotiated with the Priory of Durham the transfer of the Bailiery of Coldingham, for the term of sixty years, and a tack of the lands of Oldcambus for forty years, from the house of Wedderburn to that of Dunglass. (Priory of Coldingham, Surt. Soc. pp. 137, 148. Raine's North Durham, Appendix, p. 99, &c.) He was one of the Scottish Commissioners of truce at Hawden Stank, Oct. 18, and at Reading-Burn, Oct. 21, 1484. (Ridpath's Bord. Hist., p. 450, note.) George Hume de Aitoun was a member of the Scottish Parliament, May 9, 1485. (Acts Parl. Scot. ii., p. 169). He and his son John were, as we have seen above, esquires of the household to James IV. His successor was his son George, but we read in 1502 of Sir John Hume of Duns, as being the bearer of a letter of Henry VIII to James IV., dispatched by Andrew Forman, Bishop of Moray, the Scots Ambassador. (Rymer, apud Ridpath, p. 476, note.)

J. H.

II. BERWICK.

Copy of a Communication between the Royalists of North Northumberland and the Authorities of Berwick. (Communicated by Mr JOHN SCOTT.)

The second letter that follows shews a certain pith and marrow in the Berwick Burgesses, that is greatly to be admired. Threatened, as it seems, by members of several of the powerful families in the North part of Northumberland, officers of a portion of the King's army of the north, lying as appears from the letter, at Wooler, they yet answer the Royalists with a calmness and dignity quite worthy of the historic character of Berwick. Perhaps a great sense of security was imparted to the burgesses by the fact that they had struck as their key note, "The King and the Parliament;" and that the Scots knew this and were contemplating sending a strong garrison into the town, to take and keep possession of the renowned fortress. An interesting story, how Berwick steered its course through the civil war, is still unwritten; but abundant materials exist, and these may yet be woven into a connected whole. The first letter is that of the Royalists:—

"Coppie of the Lettre to the Towne.

"Gentlemen the necessitie of his Ma'te service, which wee find much obscured by reason of the want of your concurrence, enforceth us to dispatch this message and send these gentlemen unto you. Wee have according to his Ma'te authoritie and commission proceeded in our endeavours to advance his service, but wee find the face of disobedience so prevalent with some, that in contempt of his Ma'te service and disaffection of his government, they fly

to Berwick as to a common receptacle of malignants, thinking thereby to escape his justice, as though your town were a place of privelege, exemption, or immunity above the king's prerogative and beyond his law. Wee are sorrie you want information and advise, which we hope upon mature consideration you will reflect upon. Willing you not to persist in your mistakes making one error good with another. Hitherto, gentlemen, of generall, now to the particulars. In our Generall Musters when we appoint the officers of the law to bring us men for the king's service. Answer is made to us. They are fled to Berwick. Likewise when we send to treat with others according to his Ma'te service and commission. Answer is made to us still. They are gone to Barwick. Here is Barwicke made a Randevouze of all men that are disobedient to the king and law, if these men be suffered to persist in this way. Treason, Murders, Felonie and all crymes that wounds the king's honour and the law shall escape unquestioned and unpunished, so as they have Barwicke to fly to.

"What are the encouragements and encitements that draws this confluence to this towne? The Traitorous Rebellious and Seditious sermons that are preached among you. Some in your church, others in private conventiclis (so expressly against law) with great applause and connivance. What greater Treason can be expressed than the alienation of the hearts of the king's good subjects from him and depraveing his government, thereby rendring him odious to his loyall subjects, and studying as much as in them lyeth to foment, and give fire to this unnaturall warr that is kindled in the bowells of the kingdom threatening the utter desolation, at least, the blotting out the glory of this famous monarchie in letters of blood. By this, gentlemen, you see our zeal moved with commiseration to your misguided proceedings have drawn these lynes from us, that you thereby may have a sense and feeling what you may suffer if you continue therein.

Wee hope you will render us our desires, being so honourable and just and not give us cause to seek you in another way. Hereby you shall shew yourselves good Christians and loyall subjects.

In confidence whereof wee are,

Your loving friends and countrymen,

Wooler, March 16th, 1643.

GILBERT SWINHOE.

JOHN CLAVERING.

CHARLES BRANDLING.

ROBERT CLAVERING.

THOS. GRAYE.

JAMES SWINHOE."

Directed thus, "for the Maior, Bailiffs, and Burgesses of Berwick-on-Tweed."

"Coppie of the Answer to the l're above written here followeth:—

WORTHIE SIRS,

Wee received your l're from the gentlemen employed by you for the delivery thereof to us, whereby wee observe you lay a great aspercion upon this town, and in harbouring of such persons as fly into it, some for refuge and safetie and of purpose to escape his Ma'te justice, and to hinder his Ma'te present service, and that this town was a receptacle of all malignants, and a randevouze of all sorts of men were kept here, and that the encouragements

and incitements that drew that confluence to this town, was the traitorous and rebellious and seditious sermons preached in our church and other private conventicles, which wee to the best of our understanding doe neither know nor approve of. Be pleased therefore in answer to take notice, that our care and diligence hath been such towards the furtherance of his Ma'te service, that we always were, now are, and ever shall hereafter be, ready and willing to further the same, and it is well known that upon complaint to us, we have taken such persons as have taken his Ma'te's pay, run from their colors and come unto this town for refuge and safetie, and delivered them to such persons as then came and demanded them. And God assisting to our utmost endeavours, hereafter shall doe the like, and therefore would wish you had no other opinions of us but that wee are loyall and good subjects to his Ma'te. You seeme in the conclusion of your lettre to threaten, that if you have not your desires you will seek to remedie yourselves some other way. We have expressed our loyaltie herein to our Sovereign, and therefore hoping you will continue your good opinion of us, with remembrance of our best affections to you, wee rest,

Dated, 17th March, 1643.

Your very loving friends,

Signed by Mr MAIOR, Sir ROBERT JACKSON,
ANDREW MOORE, WM. ORDE, JOHN SALTONSTALL, WM.
ROSDEN, ROBT. MORTON, ELIAS PRATT, STEPHEN JACKSON,
JOHN BURRELL."

The direction thereof was this—

"To the Rt. Wor'll and our truly loving friends, Gilbert Swinhoe, High Sheriff of Northumberland, Sir John Clavering, Knight, and those of his Ma'te officers, and com'rs on the North parte, at Wooler and elsewhere, These presents."—(*Extracted from the Bk. Guild Books by John Scott.*)

Mr Scott, in a letter, thus sketches the sequence of events, at this momentous period, as they concerned Berwick; and I subjoin a few other notices, which, finding no place in the general historian, help to fill up a blank in the local annals. "Sir David Hume, of Wedderburn, was sent from Scotland to Berwick, in March, 1643, (the same March in which the answer of the authorities of Berwick to the king's officers was sent) to see how the people in Berwick were affected. He took their answer back to Scotland, not certainly as yet for the king or parliament, at least not openly declared. Still, they were stubbornly opposed to any relaxation of their coolness towards the royal cause. They would not, in February, 1643, even allow the royalists to beat a drum in Berwick for soldiers. This liberty they absolutely refused to Sir George Muschampe, of Barmoor, commissioned by the Earl of Newcastle." ["Sir George Muschampe, Knt., who has a commission from the Earl of Newcastle to raise a regiment of foot in the north parts by beating of a drum, wishes to beat his drum in this borough, which is not included in his commission. Ordered that he shall not have the liberty." Berwick Guild Book, 6 Feb. 1642—*apud* Raine's North Durham, p. 267.] "After Swinhoe's party got back the answer above given, the same party tried to harass Berwick by stopping all provisions from coming to Berwick from the south, and threatened them with plundering. But the burgesses braved

them out, and Captain Hall acting under the Admiral for the Parliament, came and lay in Berwick roads to assist. In June and July they were treating openly with the Scots, and by the third of September, they had formally agreed with Scotland in a series of articles." The Scottish lords, in the king's interest, advised the Marquis of Newcastle to seize Berwick, which was at that time, according to treaty, without a garrison, but he refused, of date 4th September.—"About the middle of September, the Parliament of England, apprehending the hazard of the loss of Berwick, sent down some ships, by which, with the concurrence of the Scots, it was presently garrisoned."* Spalding recounts the circumstances. "About the beginning of September, there came five of the king's own ships, now at this parliament's service, to Berwick, and landed 300 soldiers, whom the Mayor received like a traitor, and we being desired to send forces to defend this town against the king if occasion offered, send shortly a supply of men to keep and defend the same, upon all adventures, whereat the king was offended."† The king's letter of remonstrance says that what the Scots called a "popish and prelatical army, falsely alleged to be upon the Borders," were only forces necessary "for protecting our distressed subjects from the incursions of rebels, from their ships at Berwick, and Holy Island, and for no other end."‡ From the 13th to 17th of October, we have this news of the garrison. "From Berwick all is well there. Mr Darley, Governour, is very merry and blithe, and laughes and loves our countrymen, and they him, but he hath a company to rule that makes him sweate, (you know he is a grosse man) but give him his due he takes greate paines, and wakes and watches, and is stirring about at every alarm, for the enemy comes near sometimes, and blowes a trumpet at him, and rides fast away againe."§ On the 16th October, men were "gathering fast through Fife, Lothian Merse, and all be-south, to make up an army to go into England." (Spalding.) "A full Relation of the Scots March from Barwicke to Newcastle, by a messenger from the Scots armie," is contained in a tract, London, 1644, and reprinted by J. T. Brockett, at Newcastle, in 1827.

The parties who sign the letter to the town of Berwick, are: 1, Gilbert Swinhoe, of Berrington, Esq., and of Chatton: Sheriff of Northumberland in 1643-4. (Raine's North Durham, p. 184; Arch. Æliana, vol. vi., n. s., p. 102). 2, James Swinhoe, Esq., of Chatton, son of Gilbert Swinhoe. He is again mentioned in the Berwick Guild Book, in another order, dated April 1643, when the same party sent another communication to Berwick. 3, Sir John Clavering, of Callaly, who married Anne, daughter of Sir Thomas Riddell, of Gateshead, by whom he had 19 children. He was a zealous friend of King Charles I., in all his distresses, for which he incurred the displeasure of Parliament, and was cast into prison. He died 22 K. Charles I. 1646. (Raine, p. 213. Wallis Hist. Northd., ii., p. 507). 4, Sir Robert Clavering, Knt., eldest son of the last, raised, at his own charge, two regiments for his

* Burnet's Memoirs of the Dukes of Hamilton, p. 243

† Spalding's Hist. of the Troubles, ii., p. 106.

‡ Burnet, l. c.

§ Scottish Intelligencer, 13 to 17 Oct. 1643.

majesty, one of horse and another of foot; also some troops of dragoons, with which he served under the Marquis of Newcastle, and had a share in the victory over the Parliament forces at Atherston Moor, in Yorkshire. He received the honour of knighthood for his bravery. He was also made Commander-in-Chief of Northumberland and Durham, then in the possession of the Scots, whose forces, he, aided by the Marquis of Montrose, routed, took the castle of Morpeth, and the fort of South Shields, and after victualling Newcastle, directed his march to York, to aid Prince Rupert. He did not arrive till the day after the battle of Marston Moor, which was fought 2nd July, 1644. He was then seized with a fever, of which he died in the 26th year of his age, unmarried. (Wallis's Hist. of Northd. ii., p. 507; Napier's Life and Times of Montrose, pp. 254-257. Wishart's Memoirs of Montrose, pp. 30-31.) The writers of Montrose's life, attribute the whole merit of these exploits to that worthy. 5. Charles Brandling, of Alnwick Abbey, a colonel in the king's army. On the 5th February, he was taken prisoner by the Scots, in an attack on Newcastle, Brandling's horse having stumbled. He died about 1665. He was ancestor of the Brandlings of Gosforth. (Hodgson's Hist. of Northd. ii., pt. 2. p. 298. Tate's Hist. of Alnwick, ii., p. 83.) 6. Thomas Grey, may have been the eldest son of William Grey, of Chillingham, afterwards Lord Grey of Warke. Thomas was made a Burgess of Berwick, 8th June, 1664; and died 6 Feb., 1671. There are others of that name in the Grey pedigree.—See Raine's North Durham, p. 326.

J. H.

III. PHILIPHAUGH.

Extracts from the Session Records of Tynninghame, relative to the Battle of Philiphaugh. (Communicated by the Rev. A. I. RITCHIE, Whitekirk.)

24 August, [1645].

"This day at afternoon ane rendezvous at Linton bridges, and upon Monday ane rendezvous at Beinstone mure.

7th September.

This day the pepell dissolved at the blessing, in regard of ane false fray of James Grame's armie coming farder Eist, as was supposed, and not far from thir pairts all this last week ane coming to the Kirk-door and crying that his armie was at hand. No preitching at afternoon.

11th September, Thursday.

David Leslie maid his rendezvous with the Shyres of Eist and West Lothian on Glaides mure. His horsemen being about 4000 and 500, besysds some horsemen sent Suth, and Dragounes, having come to Scotland Setterday last from England.

David Leslie horse troupeis mairched South toward Teviotdale and Mers, upon Friday, the 12th September, towards James Grahame his armie; and upon Setterday, the 13th of September, 1645, James Grahame's armie utterlie defaitt at Phillip Hauche. prased be God."

Zoological Notices. By JAMES SMAIL, Esq.

HEDGEHOGS.—In summer, a boy brought me a hedgehog which he had taken from before a dog, which was trying to worry it. I put the animal into an empty rabbit-house, and a few days afterwards it produced two dead young ones. I removed one of the young ones, and two days afterwards I removed the other; and during the following night the hedgehog burrowed under the strong wood-fence which kept it in, and disappeared. A rabbit could not have burrowed with better effect.

I have seen two hedgehogs fight. This was at night-fall, in a wood. They stood on their hind legs and fought dog-fashion; but they did the worrying without noise. They fought furiously, and did not observe me, although I was within a few feet of them. One of them turned coward, and rolled up; and I pushed the other out of the way.

ADDERS.—Adders are common on Buckholm and Williamlaw hills, at Galashiels; and in some of the glens of Upper Lauderdale, they are really numerous, especially so in Blyth water and Erneleuch water. I have seen them now and again, in these glens when fishing in May and June. A year or two ago, when fishing in Erneleuch, I was baiting a hook, my head on a level with the summit of the bank, which was topped by close strong heather. I was facing the bank, and became aware of the approach of an Adder, when it was only about five feet from my face. It was looking right into my eyes, and when it was within a couple of feet of my nose I made a very hurried and I am afraid undignified jump backward into the water. The reptile, no doubt, was for getting into some hole near where I was, and did not mean to bite me. It came too suddenly upon me, however, for me to act in a cool manner.

Mr Brydon, Burncastle, told me, he had seen an Adder swim across the water; and he said farmers sometimes lost a ewe, when bitten on the udder by an Adder. A shepherd, at Burncastle, had a donkey, which died from Adder-bite.

The late Dr Riddell, Earlston, told me he had been twice called in for Adder-bite. Both cases were at Fans, near Earlston. One was the case of a girl who was bitten on the thumb, the other a woman, who was bitten on the foot. The woman's case proved a more serious one than the girl's; but both recovered in a short time. I have never heard of any person dying from Adder-bite.

ROUGH-LEGGED BUZZARD.—I recently saw a Rough-legged Buzzard that was shot in Stow parish. There was a pair, but one escaped. They had been hunting the district for a good few days.

OWL'S NEST.—In Liddesdale, where trees are scarce, the brown Wood-Owl sometimes builds in a hay-stack. A friend informs me, that a pair have built several years and successfully reared their young on the top of a hay-stack, which stands under cover, on his farm.

THE EARLIEST MORNING SONGSTERS.—Few writers, at any rate few observers agree, as to which is the bird that lifts up its voice first in the spring and summer mornings. This is not to be wondered at, because circumstances have so much to do with it. For many years of my life I have been afoot in the spring and summer months, for angling purposes before dawn—this twice a week or so; and during these years I thus have had excellent opportunities of hearing the varied feathered tribes begin their morning voicings in several districts of the Borders. About Kelso, I have often heard the Wren singing at the merest approach of dawn; and I once heard it at Wooden burn foot, before any appearance of dawn whatever, the morning being fresh and slightly rainy. In that district I occasionally heard the Robin first. In Leader water the Thrush was often first bird; and sometimes the Wren. But I never heard any bird earlier with its voice than the Rook, in the nesting season. I have heard Rooks when it was so dark that I could not see them flying overhead. Jackdaws are as early as any bird about Galashiels. In Jed water, especially a few miles above Jedburgh, the Lark is generally the herald of the morn. Whenever the morning was frosty I seldom heard any bird until the dawn had given out a goodly amount of light; but when it happened to be fresh, with mild rain falling, great numbers of birds were always singing before it could be said to be light. Might this arise from instinct telling them that under such an atmosphere food, in the shape of slugs, worms, and grubs, would be found in abundance in the morning light?

SINGING OF BIRDS IN AUTUMN.—In Roxburghshire I have not heard any bird sing in autumn, saving the Redbreast and Water Ousel. I have heard the Lark singing in the Merse, however, in autumn, and I have heard the Chaffinch sing his full song in the

same season at Muirieston, near Mid Calder. A number of our song birds in the Borders give short broken notes, and these only in autumn. I have, in a mild winter, heard the Misselthrush singing near the end of December, on the sheltered banks at Pinnacle-hill. I heard the Misselthrush sing on the afternoon of the first of January, 1876, at Lowood, near Galashiels: The day was sunny and mild; and I never previously heard this bird sing in this locality before the first of February.

TAME REDBREAST.—I have a tame Robin, which came in by a window, a little more than two years ago. He went off for the first summer after he came to us, and returned in December, 1875. We have many birds in the room in which he lives; and whenever he came back his cage was hung in its old place, and Robin went into it at once and began to feed; and he immediately after feeding made the round of all the cages, and had a bit of a bicker with some of the inmates, most of them old friends. Last summer he was allowed to go off again; but after flying out at the window he looked around, and very soon flew into the house by another window, and was soon in his old quarters. It may not prove amiss to state that for two Christmases we had this bird, a *live* Robin, sitting and sleeping on our Christmas tree. He sings freely, but not in his cage.

FOOD OF ROOKS.—Until recent years, naturalists and writers on Ornithology nearly all gave somewhat careless, and therefore inaccurate accounts, as to the food on which these birds subsist. The Rook is by some placed as a purely granivorous bird, by others as purely insectivorous, and by many it is characterised as a feeder on both grain and insects. The term *omnivorous* is, in my opinion, the most accurate that can be applied, for the Rook will devour almost anything edible. It is fondest, however, of insect and fleshy food. In late and frosty spring weather, when slugs and worms remain in shelter, the Rook hunts up the eggs of game birds, and even at times has been seen to carry them to the rookery—for its young doubtless. The Rook is also occasionally a bird of prey; and it is just as fond of carrion as the "blackneb." Of late, it has (in the district in which I live, at least), taken to eating turnips in time of frost in winter; and in the early spring it eats them, whether the weather be frosty or not. I have, on several farms, seen large quantities of turnips broken and greatly injured by rooks. They eat the green-top

yellows ; but are fondest of Swedes. They dig into the bulbs and make holes, often pear-shaped, and when these get filled with water and frozen, the turnips become nearly useless when a thaw sets in.

TAME ROOK.—For several years I had a Rook, which was brought from a rookery when young, and in full feather, and which was accidentally killed. He was most remarkably tame, besides being smart and clever ; much more so than a Jackdaw I have had for many years. The Rook at times made so much fun amongst the children, tugging at their clothes, or stealing or trying to steal small things from them, sometimes giving chase and sometimes being chased by them, that I really think he had some idea of fun. During the day he and the Jackdaw had the range of a large apple tree, where they did a good deal of gossip, and sometimes a short round of fighting with wild Jackdaws and an occasional Rook. Throwing any light thing up to them on the tree, the Rook generally was the catcher of it. A penny thrown to him at an elevation of fourteen feet or so, he almost never failed to catch. With the penny in his beak he used to watch eagerly for more, and when a second was thrown he generally dropped the first to catch it ; but I, and others, have seen him catch the second penny without dropping the first ; and it was amusing to see him hopping about the tree in high glee, head and tail erect, with twopence in his mouth. In the house—and he was brought in nearly every day—he had places where he hid spare bits of butcher-meat, and small toys he had got or taken from the children ; and it often appeared to me as if he enjoyed the make-believe attacks he made on the children when they approached his hidden stores, which he watched with wondrous care. Some of the larger children he sometimes bit, when they took pet things from him ; but the youngest child could get anything from him without being bitten ; and he never offered to bite me on any occasion. He flew off to the Gala Park rookery after he had been with us a month, but he returned at nightfall.

In the first summer and autumn of the year in which I got him, I often watched his ways when on the prowl for food in the garden. He moved stones by inserting his beak under them and then opening it. This enabled him to see what grubs might or might not be underneath. He was fond of pulling up the larger shot-blades of grass ; and when the stem came up he

always gave a quick look into the small hole from which it had come. This was, doubtless, with a view to getting a few grubs, always a favourite food. The stem itself he always nibbled and squeezed along on the soft part, perhaps feeling for grubs there also; but he seemed also to relish the sweet sap of the stem. Potatoes he pulled boldly up; and ogled the hole whence the shaws came, in the same manner as he had done in the case of the pulled grass. My idea is, that Rooks carry off potatoes, more with a view to picking out the small grubs often found in them, than to eating the tuber. Seed potatoes, after being in the ground for a month or two, often contain large numbers of insects of varied kinds. I sometimes offered him a slice of raw potato, but he seldom ate any of it.

This Rook got the scabrous beak, "whiteneb," at the second moult, when about sixteen months old; and another tame Rook, which I had, got the scabrous beak in early spring, when about ten months old. In a wild state the change in colour of the beak takes place during the first winter.

Although I have written of my tame Rook as *he*, I did not know the sex; and I have never seen in any book mention made of any difference in shape, size, or appearance, between the cock and hen of Rooks. I may also notify that, although I have been an observer of Rooks and their ways for a long course of years, I have only once observed sexual contact.

I think Rooks are the most sagacious birds in our islands.

ROOK NESTS IN OCTOBER.—A year or two ago, some Rooks built nests in the month of October, at Timpendean; and although the nests got pretty well tattered before the spring, the birds came back then, repaired them, and bred in them. I got this information from Mr Boog, Timpendean.

JACKDAWS.—Jackdaws have multiplied largely in Galashiels district of late years. The town of Galashiels having extended much in size, the Daws find an increase of shelter and nesting-room. They nest to a large extent about roofs and empty chimneys on mills, dwelling-houses, and public-buildings. A year seldom passes without a Jackdaw, old or young, coming down some of our bedroom chimneys. The number of Jackdaws that associate and lodge at night with Rooks, has also been much augmented of late years.

CUCKOO-KOO.—I heard at Howford, Peeblesshire, a Cuckoo

which called in three syllables, thus:—*Cuckoo-koo : Cuckoo-koo*. The last syllable was given with the *o* short. I thought at first the sound might arise from an echo, as a wood and a quarry are at the place; but Mr Riddell, Howford, informed me that that was the bird's natural call. A friend has since informed me that he has heard a similar call in Liddesdale; and said the double note was generally heard after the birds had been for a considerable time in the neighbourhood.

YOUNG CUCKOO.—I saw a young Cuckoo in end of August, at Burncastle, Lauderdale. It flew at short distances from place to place before me, for a considerable time; and was accompanied by a Tit-lark. I thought at first it was a Merlin Hawk.

VITALITY OF EGGS.—A friend took an egg from a Pewit's nest; and after taking it home, seven miles, he gave it a puncture, with a view to blowing it. He, however, heard a cheep from the egg, and laid it aside for a week. He then took it back and placed it in the nest; and on his next visit he found all the eggs had produced young healthy birds. For the week it was kept, the egg lay on a kitchen mantel-piece.

SWANS.—A summer or two ago, three Swans flew over me at St. Boswells; an old one and two young ones, apparently. They flew at an elevation of about sixty or eighty yards; and the whistling of their wings was loud and clear. I presume it must have been from this sound that so many have written about Whistling Swans.

The sound the Snipe makes when diving and twisting down the air, comes from the wings; yet some writers say it is from the voice.

TAME GULLS (*Larus argentatus*).—I brought a pair of very young Sea Gulls, of the common kind, from the Farne Islands, in August last. They have the run of the garden; are very pretty, and very tame; and they are in excellent health. They are so fond of bathing, that in frosty nights they have to be forced from the water, so as to save them from getting frozen-in. They are still darkish brown in colour. Next summer they will get white plumage. They are now full grown. The largest measures in expanse of wing 52 inches, and in length of body, from point of bill to end of tail, 22 inches.

BROWN-HEADED MEW (*Gavia ridibunda*).—These birds nest in immense numbers in Legerwood Moss, Upper Berwickshire.

When startled from their nests there, they are so numerous, that they rise on wing like a white cloud. In a small moss about a hundred yards from the Haining Loch, Selkirk, they also nest. These birds fly about during the night. I have heard their sharp creaking cry at all hours of the night, in mid-summer.

LOB-WORM IN WATER.—Many people think that the Worms on which trout get gorged in a flood, are brought into rivers by flooded drains and the like. Such is not the case. The Worms are bred and fed in the river-beds, under the stones. When a flood comes it moves many stones, and dislodges the Worms, which fall a ready prey to the voracious trout. By turning over those stones, which form what is locally called the “dry channel,” at the edge of a river, Worms will be found numerously embedded among the damp sandy soil underneath; and where the water is running Worms will always be found more or less numerous underneath the stones, provided they lie on soil, or on soil intermixed with the river sand. I have picked Worms out of the Teviot, at Kelso, from beneath stones over which the water was running at from two or three to eight or ten inches in depth. These Water-worms are nearly all of a dark red colour, with black heads, and somewhat flat in head and body. Some of the small worms are green. I have often caught trout with the largest of the two kinds. They, of course, have no soil inside.

Having observed that these apparent earth worms lived and flourished in the rivers, I thought I would try what effect might be produced by keeping a large Dew or Lob-worm in water. I accordingly took from the garden a very large specimen; and put it into a glass jar beside a live minnow, which had inhabited the same for a year. At the bottom of the jar, there were a considerable number of small pebbles. The worm for a short time crawled and wriggled, as if a little frightened. It then settled among the stones, the minnow swimming about overhead. The water was changed every three days; and the worm having been immersed a few days gave up crawling, unless for the purpose of twining round a fresh stone now and again. At the end of six weeks it was as lively as when it was put among the water; but it was much clearer than when immersed, because all earthy matter had been discharged. The jar was broken by accident at the close of six weeks; and I then took the worm, which wriggled in my hand, and placed it again in the garden, where it soon crawled out of sight.

The minnow and the worm took no notice of each other. The minnow, however, often swallowed a worm, put in for it, as long as itself; and when such a worm was taken in *end first* the other end sometimes remained outside its mouth for a considerable time, or till such time as the end first swallowed had been partly digested. The protruding nose or tail of the worm used to go out and in a little with every in-and-out draught made by the minnow. The digestive power of fish seems much stronger than that of land animals.

GLow-WORMS.—I have seen many Glow-Worms, first and last, on Tweedside, about Thornielee. I gathered some one night and brought them home, and tried to keep them in the grass behind my house; but the sparrows, I think, breakfasted on them. The glow or light comes from near the tail of the worm, which is of a somewhat speckled brown colour and very velvety.

NOTE.—Mr Smail is desirous of obtaining a return of the Rookeries in the counties of Northumberland, Berwick, Roxburgh, Selkirk, and Peebles, and he has sent out the following queries to many members of the Club. He would feel exceedingly favoured if members who have not received the schedule would kindly send him information, especially as to the number of Rookeries. Schedule of queries, &c., sent out:—

1. Name the Rookeries you know to exist in each of these counties. State also whether the Rookeries are large or otherwise.

2. Do you know the age of any of these Rookeries? If so, state it.

3. State what Rookeries have been destroyed, and what means were used for their destruction.

4. Do you consider Rooks are much more numerous now than twenty-five years ago?

5. Do you know any Rookeries in which the Rooks reside in winter? If so, name them. *Note.*—The only Rookeries known to the writer in which the Rooks roost at night in winter are respectively at Marlefield, Roxburghshire; Mellerstan, Berwickshire; Sunderland Hall, Selkirkshire.

6. What kind of food do Rooks eat? State particularly whether in your neighbourhood you know them to eat bulbs of turnips, or clover; and whether you know of their preying on the eggs or the young of partridges, pheasants, or other birds. State also whether you have known them to injure young lambs.

Please state whether you consider Wood-Pigeons have increased in number in your district within the last twenty-five years.

Please also to give the names of Heronries in the counties named, and state something as to their size.

[*Address*—J. SMAIL, Bank House, Galashiels.]

Description of a new Genus and Species of Arachnida
(*Calypstostoma Hardii*.) By the Rev. O. P. CAMBRIDGE,
M.A., C.M.Z.S., Hon. Memb. N.Z. Inst.

[From the "Annals and Magazine of Natural History," December, 1875.]

Order ACARIDEA.

Family Trombidides.

Gen. nov. CALYPTOSTOMA.

Characters of the Genus.

Body oblong oval, rather broader before than behind (the fore part somewhat obtusely subangular), upper surface very convex; epidermis continuous, without any contractions or foldings to indicate the limits of the cephalothorax, caput, or abdomen.

Mouth-parts apparently very minute, concealed in a deepish circular cavity at the extremity of the fore part.

Eyes six in number, in three pairs, forming a triangle on the upperside of the fore part of the body; the apex of the triangle (being the most obtuse of its angles) directed forwards; the eyes of each pair are contiguous to each other, and seated on very slight tubercles.

Legs short, slender, seven-jointed; the legs of the first and second pairs and third and fourth pairs, respectively, on either side, have their basal joints in contact with each other, describing nearly a square on the under surface of the body, towards the fore part; their relative length appears to be 4, 1, 2, 3, though those of the fourth and first pairs are very nearly of the same length, and those of the third pair but little, if anything, shorter than those of the second. Each tarsus terminates with two curved claws, which spring from a cleft at the extremity of its upperside.

The *genital aperture (female)* is placed just behind the basal joints of the third and fourth pair of legs.

Calypstostoma Hardii, sp. n.

Adult female, length 2 lines.

The colour of this interesting Acarid is a uniform reddish yellow (which, however, may possibly, in life, have been a bright red), the legs and genital and anal apertures being light yellow-brown; the whole epidermis, which is of a somewhat coriaceous

nature, is thickly covered with minute round punctures, connected in somewhat regular series, with slight groovings or wrinkles of the skin; and from each puncture there issues a short, strongish, curved, pale amber-coloured diaphanous bristle. Ten small dark red-brown points, or spots, in so many very slight depressions of the surface, and forming two longitudinal lines, occupy the median line of the upper surface; from behind each of the last two of these points runs a short oblique line or very slight indentation. The underside has two small dusky red-brown spots, one a little way behind each of the basal joints of the second pair of legs. The genital aperture has a somewhat corneous appearance; it is of an oval form, convexly prominent, and divided longitudinally by a gaping incision; not far behind it is the anal orifice, which is of the same form and character externally as the genital aperture, though not a fourth of its size.

The *eyes* (seated as above described) are very distinctly visible; those of the foremost pair (forming the apex of the triangle in which the three pairs are placed) are of a triangular shape, closely contiguous to each other, and smallest of the six; those of each lateral pair are also contiguous, on a distinct tubercle, the posterior eye of each being the largest of the six; they are of a pale dull amber-colour, and margined with red-brown.

The *legs* are furnished with short hairs; the basal joints are the strongest; the next are very short, and turned on the outer side; the tarsi, metatarsi, and femora of each pair are of very nearly equal length; the tarsi of the first pair are rather dilated towards their fore extremities, and are (like those of the other three pairs) cleft at the fore extremities on the upperside, two apparently simple terminal curved claws springing from the cleft.

The *palpi* are very minute, and, with the other parts of the mouth, placed at the bottom of a deep circular pit or cavity at the extreme fore end of the body; being thus minute, and sunken below the surface, as well as covered with the hairs fringing the cavity, their form and structure could not be ascertained with the magnifying powers at my disposal.

Two examples (both females) of this remarkable Acarid were received, among numerous spiders, from Mr James Hardy, of Oldcambus, Berwickshire, by whom they were found (probably among moss) on Cheviot Hill. It is unlike anything I have ever

seen before ; and Dr L. Koch agrees with me in the opinion that it is new to science. The curious position of the parts of the mouth, with the eyes and other characters, necessitates the formation of a new genus for its reception. It is with much pleasure that I connect the name of Mr Hardy with this interesting addition to the known species of our indigenous Acaridea.

Notes on the occurrence of Rare Birds in this district. By
VALENTINE KNIGHT, ESQ.

GREEN SANDPIPER (*Totanus ochropus*).—One day about the third week in last November, I flushed a specimen of this rare Sandpiper, on the Teviot, immediately below Roxburgh Mill. It settled again about a hundred yards further down the pool, but being certain of its identity, and having a rod in my hand instead of a gun, I did not again disturb it.

GREENSHANK (*Totanus glottis*).—Saw two of these birds at Holy Island, in the month of August last, and succeeded in shooting one at the Coves point there, on the 18th of that month. Also, upon several occasions, in the early part of the following month, I saw from one to three of these waders—on one occasion seeing three in company—on the Teviot, near Nisbet. They have a wild and very melodious note—four or five times repeated—and quite distinct from that of the Redshank. These birds were doubtless on their migration southwards.

GREAT SNIPE (*Scolopax major*).—On the 20th of July last, I flushed a Great Snipe three times on the banks of the Teviot, close to Nisbet bridge. This, I am fully aware, is an unusually early date for the arrival of this species, but being quite sure of its identity, it occurred to me there was a possibility, though not a probability, that it might have nested in the district. I therefore, about a week afterwards, found out the keeper, and asked him if he could give me any information about the bird. He at once told me he had seen a “large” Snipe about a week before, which answered to the time I myself saw it, but of a nest he knew nothing. Morris states that “many years ago” four

solitary Snipes—two of which were *scarcely fledged*—were shot on Fishburn Carr, between Castle Eden and Darlington; I cannot find that this has been questioned, neither can I find that it has been alluded to by other authors. Henry Stevenson, however, in his “Birds of Norfolk,” mentions a supposed instance of the Great Snipe breeding in Norfolk, the nest and four eggs being found by Mr Hansell, of Thorpe, near Norwich. Three of the eggs were accidentally broken, and the fourth was presented to the Norwich Museum; and Mr Alfred Newton—to whom it was forwarded for comparison—remarks, “I can nearly match it as to colour, and entirely as to size, by Common Snipe’s eggs in my collection;”—and “I can scarcely doubt its being a Common Snipe’s.” As to date, Mr Stevenson says, “from my notes for the last twenty years, I find the 17th of August the earliest date of its occurrence in Norfolk.” The 20th of July, I confess, rather staggered me, but 1876 was a most extraordinary year for weather in most parts of the world, and we know how birds are constantly influenced in their migratory movements by extraordinary and unseasonable weather.

I found this bird first on a very dry meadow, amongst some long grass and thistles, and almost trod upon it; its flight was straight and low—never rising above a couple of feet or so from the ground—and heavier than that of the Common Snipe; it uttered no note whatever, and dropped again within twenty-five yards on the same meadow. I went at once to the spot, and it lay till I was within four yards or so; rose silently again, its flight, &c., being precisely similar, but this time it pitched again further off, about one hundred yards from me. The third time it again lay very close, but it had become wilder, and flew nearly out of sight, and it did not even in this longer flight rise in the air like the common species. It will, therefore, be seen that on all three occasions that I flushed this bird, it presented all the characteristic features of the Great Snipe, its silence excepted, if I may call it excepted, when authors are divided on that point. Stevenson says, “by some authors the bird is described as uttering *no sound on rising*, but Selby remarks that, when flushed, it generally utters a cry in some degree similar to that of the common species, but shorter and hoarser.”

WHITE-FRONTED GOOSE (*Anser albifrons*).—Through the courtesy and kind permission of Mr Wright, of Beal, I was

enabled to see two of these birds on that farm on the 28th December, 1876. After a long stalk I managed to get within about sixty yards of them, and one of the birds having its head towards me, I saw distinctly the black markings on the breast. The specimen shot a very short time previously on a neighbouring farm—I believe the adjoining one—and secured for the Berwick Museum, had probably been in company with these two birds, as it seems they had been in the neighbourhood for some time. The field on which I found them feeding, was green with clover, a favourite food with the species. The White-fronted Goose may certainly be considered scarce in this district, as we very seldom hear of its capture.

RICHARDSON'S SKUA (*Lestris parasiticus*).—Shot a remarkably fine specimen of this Skua on the 18th of August last at the Coves, Holy Island; it is in the usual adult plumage. Mr Hancock says this species is common in September and October; it is, however, a bird I have long been on the look out for, and yet this is only the second I have seen at or near Holy Island in all my experience in shore shooting.

Kelso, January, 1877.

Notes. By GEORGE BOLAM, Weetwood Hall. 24th Jan., 1877.

1876.

Dec. 27.—Two Golden-eye Ducks (*Anas clangula*, Pennant) male and female, both young birds, were shot here, and at same time several others were observed flying about

1877. on river banks.

Jan. 2.—A Water-rail (*Rallus aquaticus*, Pennant) an old female in full winter plumage (and the only one of the kind I have seen here) was shot in river Till.

„ 13.—A Red-throated Diver (*Colymbus stellatus*, Pennant) was picked up on the river side, a young male in very bad condition and weighing a little over 2 lbs.

„ 16.—A Rough-legged Buzzard (*Falco lagopus*, Pennant) was shot on Horton Moor, by A. Bolton, keeper to

112 *Notes on Tweed Salmon Fishing*, by George L. Paulin.

Geo. Culley, Esq., of Fowberry Tower, and has been added to his extensive collection of Northumbrian birds. It was a female in fine plumage, measuring 4 feet 4 inches from tip to tip. Other birds of the same species have been seen flying about since this was shot.

Jan. 16.—A Great Shrike (*Lanius excubitor*, Pennant) was shot by a person named Simpson, at Wandon, near Chatton.

I have twice before seen Butcher birds in this district.

12 —A Wood-pigeon, of a light rose colour, has been observed flying about; it has, however, eluded capture

23 up to this time, generally going with a large flock of these pigeons, which frequent the woods at Weetwood and Horton at this season of the year.

„ 24.—A Red-breasted Merganser (*Mergus serrator*, Pennant) an old female in winter plumage, was shot in the river Till this morning.

Notes and Statistics as to Tweed Salmon Fishings. By Mr
GEORGE L. PAULIN.

SEXES OF SALMON AND GRILSE.

Supposing the number of fish of which the sex was ascertained to be represented by 100, the proportion of Male and Female fish was as follows.

SEASON.	SALMON.		GRILSE.	
	Male	Female	Male	Female
1874	33	67	39	61
1875	32	68	38	62
1876	28	72	42	58

WEIGHT OF LARGE SALMON, TAKEN BY NETS.

SEASON	From 25 to 30 lbs. each		From 30 to 35 lbs. each		From 35 to 40 lbs. each		Above 40 lbs.		The three largest weighed respectively.
	Number	Average Weight	Number	Average Weight	Number	Average Weight	Number	Average Weight	
1874	40	27½ lbs	11	32½ lbs	4	37¼ lbs	2	43 lbs	43, 42½, and 39lbs
1875	19	28 ,,	4	32¼ ,,	2	36 lbs	1	41 lbs	41, 36, and 36lbs
1876	30	27 ,,	10	32½ ,,	3	36¼ lbs	2	41½ lbs	42, 41, and 37lbs

From a daily record kept during the Fishing Season at one of the Stations on the Tweed, the following Table has been compiled :—

SEASON.	Number of Days on which the river was		LARGEST "SPATE."		Number of days on which the river was flooded to depth of 3 feet or more.
	above the ordinary Summer level.	at, or below the ordinary Summer level.	Feet.	Date.	
1874	77	104	9.6	3rd April.	4
1875	60	122	7.0	9th March	4
1876	110	73	11.0	29th April	15

TWEED SALMON TAKEN BY ROD AND LINE.

The following table is made up from information furnished at different times in the "Scotsman" Newspaper, under the heading of "Angling."

SEASON.	Total number reported		Weights given of				Weight of large Salmon.						The four largest, weighed respectively.
			Salmon.		Grilse.		From 25 to 30lbs.		From 30 to 35lbs.		From 35 to 40lbs.			Above 40 lbs.
	Salmon	Grilse	Number	Average Weight	Number	Average Weight	Number	Average Weight	Number	Average Weight	Number	Average Weight	
September, October, and November, 1873	1729	209	663 0 $\frac{1}{2}$ lbs	118 8 lbs	80 27 lbs	32 31 lbs	8 36 $\frac{1}{2}$ lbs	4 45 lbs	52, 44, 44 and 41 lbs.				
Same months, 1874	832	80	389 20 $\frac{3}{4}$ "	41 7 $\frac{1}{2}$ "	44 26 "	20 31 "	2 36 "	—	37, 35, 34 and 32 $\frac{1}{2}$ lbs				
Same months, 1875	674	66	339 20 "	29 7 $\frac{1}{4}$ "	36 25 $\frac{3}{4}$ "	7 30 $\frac{1}{2}$ lbs	2 37 "	2 45 "	45, 45, 38 and 36 lbs.				
Same months, 1876	704	57	380 21 "	45 7 $\frac{1}{2}$ "	56 28 $\frac{1}{4}$ "	8 32 $\frac{1}{2}$ lbs	2 37 "	4 47 $\frac{1}{2}$ lbs	53, 49, 44 and 44 lbs.				

Observations on some recent examples of remarkable Border Fishes. By Mr ANDREW BROTHERSTON, Kelso.

THE following are some of the more interesting fishes that have passed through my hands during the past year:—

I. THE SMOOTH GURNARD (*Trigla lavis*), Mont. Flem.=The Sapphirine Gurnard (*Trigla hirundo*), Yarrell, *not* of Fleming. On May 12, 1876, a very fine specimen of this beautiful fish was caught by some fishermen near Berwick. It was following a line which was being hauled in, when it came so near the boat that it was “gaffed.” A peculiar characteristic of this family is the three detached rays or tentacles at the base of each pectoral fin, which give them the appearance of having feet; and there is no doubt of their being used by the Gurnards in much the same manner, and for like purposes as the feet in other animals. M. Deslongchamps has given a description of their mode of procedure at the bottom of the sea. “In 1839, he had an opportunity of observing their movements in one of the artificial sea-ponds or fishing traps, surrounded by nets on the shores of Normandy. He saw a score of Gurnards closing their fins against their sides like the wings of a fly in repose, and without any movement of their tails, walking along the bottom by means of the six free rays, which they placed successively on the ground. They moved rapidly forwards or backwards, to the right and left, groping in all directions with these rays as if in search of small crabs. * * * During these movements, they resemble insects running along the sands.”—(*Land and Water*). They have also been seen out of the water climbing among the rocks, and walking on the sands. There has been some confusion regarding the name of this fish. Fleming’s description of the Smooth Gurnard (*T. lavis*) agrees with this example, but his Sapphirine G. (*T. hirundo*) is different. In Yarrell’s “Brit. Fishes,” 2nd ed., I can find no notice of Fleming’s *T. hirundo*, but his *T. lavis* is given as a synonym of *T. hirundo*, Linn. The number of fin-rays, as given by these two authorities, differs—

Fleming—D. 9—16 : P. 9 : V. 6 : A. 15.

Yarrell —D. 9—16 : P. 11 : V. 1 + 5 : A. 15 : C. 11.

In the above specimen the rays of the pectoral were nine, agreeing with Fleming. It will thus be seen that the number of fin-rays is not always to be depended upon as a distinctive

character, as the number is liable to vary in different individuals. (See also Grayling and Goldsinny of Jago).

II. GREAT WEEVER (*Trachinus major*), Penn.—There was one about 10 inches long, caught in Berwick Bay, Sept. 27th, 1876. The Weevers differ from the true Perches in having the ventral fin situated before the pectorals. The body of this species is lengthened, the scales arranged in oblique lines sloping backwards from above, showing yellow and black stripes in the same direction. The spines on the dorsal fin and the operculum of this fish are supposed to be venomous, hence one of its names—Sting-bull. It is believed to be the *Draco* of the ancient naturalists. Yarrell says, “When caught, it should be handled with great caution.” “I have known,” says Mr Couch, “three men wounded successively in the hand by the same fish, and the consequences have been in a few minutes felt as high as the shoulder.” After death the spines must lose much of their effect. When preserving it I received several wounds, but felt no more pain than if they had been inflicted by any other sharp body.

III. GRAYLING (*Thymallus vulgaris*), Cuv.—The Teviot, into which this fish was introduced by the late Marquis of Lothian, appears to be particularly suitable to its habits, as it is there increasing rapidly, and is also spreading into the Tweed. The first specimen that I saw (I believe a few had been obtained before that) was caught by Mr A. Steel, on the 6th of November, 1868. It was $14\frac{1}{2}$ inches in length. I have since seen numerous examples, one which Mr R. Rodgers killed (December 7th, 1876) is $18\frac{1}{2}$ inches long, and I have heard of others still larger. Some authors consider the Grayling to be a migratory fish, leaving the sea early in the spring, ascending clear and rapid rivers to spawn, where it remains till autumn, and then returns to the sea. Whatever may be its habits in other rivers, it is not migratory in the Tweed and Teviot, where it is caught at all seasons. On comparing the number of fin-rays as given by Fleming and Yarrell for this species, with two specimens now before me, I find that all are different—

Fleming—D. 18 : P. 12 : V. 11 : A. 11 : C. 19.

Yarrell —D. 20 : — 15 : — 10 : — 13 : — 20.

$18\frac{1}{2}$ in. long	} Teviot. {	23 : — 14 : — 9 : — 15 : — 20.
16 in. long		24 : — 13 : — 9 : — 15 : — 20.

IV. GOLDSINNY OF JAGO (*Crenilabrus rupestris*) Selby.=*Lutjanus rupestris*, Bloch.—During the violent storm which raged along the eastern coast on the 20th and 21st of December, 1876, three specimens of this interesting fish were thrown out by the sea near Berwick. Their lengths were respectively $7\frac{1}{4}$, 7, and $6\frac{1}{2}$ inches. They varied in colour, the largest and the smallest being of a deep orange on the back, becoming lighter downwards, and getting nearly white on the belly. The other is much darker, greyish green, intermixed with yellow, showing transverse markings on the sides. There is no doubt of all three being the same species, as each had the characteristic dark spots, one on the anterior portion of the dorsal fin, and the other at the base of the tail near the upper edge. In Selby's otherwise excellent figure of this fish (Mag. of Zool., and Bot. i., pl. 6) the dark spot is represented on the uncovered part of the rays of the tail, whereas in all these examples it is on the scaly part fully three-eighths of an inch from where the scales terminate, about one-half of the tail being covered with scales. The following shows how the fin-ray formula differs in different individuals of this species :—

	Length of Specimen	Dorsal	P.	Ventral	Anal.	Caudal.
Selby, Mag. Zool. and } Bot. i., 169 - - }	$6\frac{3}{4}$ in.	18+9	14	1+5	3+8	15 and 2 short.
Thompson, do., do., } do., ii., 445 - - }	$4\frac{1}{2}$ in.	17+9	14	1+5	3+8	{ 15 well de- veloped. Br. 5.
Do. do.	$4\frac{3}{4}$ in.	18+9	15	1+5	3+8	15
Yarrell, British Fishes, } 2nd ed. i., 336 - }	* ?	17+9	14	1+5	3+7	13
The three Berwick speci- mens cast out by the sea, Dec. 21, 1876	$7\frac{1}{4}$ in.	18+8	14	1+5	3+8	13 and 2 short.
	7 in.	18+9	15	1+5	3+7	15 and 2 short.
	$6\frac{1}{2}$ in.	18+9	15	1+5	3+8	15 and 2 short.

The Goldsinny seems to have been lost sight of in this country, or confounded with others of the same family, from the time of Ray—who appears to have been the first to make it known, until the 20th of February, 1836, when Mr Selby got a specimen, which was left on the shore near Bamburgh, after the reflux of an extraordinary high tide. At the same time other two were picked up in Berwick Bay, and secured by Dr Johnston. These

* Yarrell had seen no examples more than seven inches in length.

specimens became the subject of a notice by Mr Selby in the first volume of the Magazine of Zoology and Botany, where they were correctly referred to the Goldsinny of Jago. In the first edition of Yarrell's British Fishes, the author misled by Pennant in Brit. Zool. called the Corkwing—(*Crenilabrus Norwegicus*) Cuv.—the Goldsinny of Jago, and Fleming appears to consider it a variety of *C. tinca*. "In some varieties there is a black spot on the tail and another at the beginning of the dorsal fin constituting the Goldsinny of Jago."* (Brit. An. p. 208, sp. 128). In the 3rd Ed. of Yarrell's "Brit. Fishes," v. i., 498, *C. Norwegicus* and *C. tinca* are considered the same species, and united under *Crenilabrus melops*, Cuv. et Valenc. xiii., p. 167.

V. TADPOLE FISH (*Raniceps trifurcatus*) Flem.—A specimen, $10\frac{1}{2}$ inches in length, of this rare fish, was found at the same time and place as the Goldsinny. Fleming describes two species, *R. trifurcatus* and *R. Jago* = *Barbus minor* Jago,† but both these are considered as one by later authorities; the characters of *R. trifurcatus* having been taken from a dry; and *R. Jago* from a fresh fish, as it does not show the tubercles, which are situated on each side at the commencement of the lateral line, until it is dry. The description of this species in Yarrell's "British Fishes," is taken from Dr Johnston's Address read at the first Anniversary Meeting of the Berwickshire Naturalists' Club, in Sept. 1832. It differs slightly from that of the present example; he refers to the tubercles on the origin of the lateral line as *pea-like* tubercles, in this they were *elongated*, obscure elevations which could not be seen until the skin was dry. When describing the head he says "there is a slight depression between the eyes," and Dr Parnell in "Mag. Zool. and Bot." says, concerning the same "with the crown of it remarkably flattened and depressed." Although large and flattish there was no depression between the eyes. Dr Johnston and Dr Parnell's descriptions do not agree in the colour of the eyes; the first has them "lateral, prominent, round, and black," the latter, "of a pale yellow colour."

* ["Maculâ nigrâ insigni juxta caudam notatur; Pinnæ quoque dorsalis radii priores tincturâ nigrâ imbuuntur."]—Rev. George Jago in Ray's *Synopsis Methodica Piscium*, p. 163, London, 1713.]

[† The Rev. George Jago, of Looe, in Cornwall, was the first to describe and figure both forms, which he called the "Great and Lesser Forked-Beard" respectively. Raii *Synopsis*, &c., p. 163, 164.]

Fleming also says that they are yellow. As the eyes of many animals lose or change their colour after they are dead, the irides of this specimen when alive may have been yellow, but when I got it they appeared to be either black or very dark brown. Dr Parnell's description (Mag. Zool. and Bot. i., 344) differs from this also in the following particulars:—"The head is large and wide, a little more than *one-third* the length of the body"—probably a slip of the pen for *one-fourth*, as both Dr Parnell's figure and our specimen are about that proportion. Again, "immediately over the base of the pectorals the first dorsal fin commences." In this it originates half an inch farther back. When describing the ventral fins, he says of the two first rays that they "extend a little beyond the origin of the anal fin." In this they are half an inch short of it. This one also wants the "broad, light-coloured band running across the middle of the pectoral fins." In other respects the description fits the Berwick fish; but individuals may differ in this, as they do in many species both of animals and plants. The number of the fin rays in Dr Parnell's description, is different from that of Fleming and Yarrell (Brit. Fishes, 2nd Ed.), which are alike; both appear to be from the same source, viz., Pennant. Owing to some of the fins being damaged, I could not tell the number of rays in them, but so far as I could see they agreed with Parnell. The tail had met with an accident while the fish was young; it appeared as if a piece had been bitten out of the middle of it, causing it to appear as if it was forked, whereas it should have been rounded. From the place whence the bit was taken, Nature had attempted to fill up the vacancy. Is it usual for fish to reproduce fins or parts of them which they may happen to lose?

VI. BALLAN WRASSE (*Labrus maculatus*), Yarrell.—There was a large specimen—20½ inches long—picked up along with the Goldsinny and the Tadpole-fish, and I had another 18 inches long, which was caught near Dunbar, November 28th, 1876. This is a beautiful fish, orange and blue being the predominating colours. It seems to be common on the rocky parts of the coast. Referring to the fish thrown out by the tide, Feb. 20th, 1836, Mr Selby says, "The species noticed, mostly belonged to the *Labrus maculatus*."

When I got these fish (the Wrasses and the Tadpole-fish) I

thought that they had been killed by being dashed against the rocks. Perhaps they were, but after dissecting them, I am more inclined to think that they were choked, as the mouth and gills, especially of the Wrasses, were completely blocked up with sand and mud, although it may have got there after death. They are all preserved for the Berwick Museum.

VII. THE GREEN COD (*Merlangus virens*), Cuvier.—The stomachs of two Divers, which were shot in the end of December, 1876, between Berwick and Spittal, were full of this fish, averaging about 6 inches in length; from which it would appear to be plentiful about the mouth of the Tweed. The Green Cod is now generally considered to be the young of the Coalfish—*M. Carbonarius*, Cuv.

Birds and Lepidoptera observed at or near Scremerston.
By Mr ARTHUR H. EVANS.

Birds.

SPARROW HAWK (*Accipiter fringillarius*).—I have noticed that this bird generally builds its own nest, or at any rate only founds it on a Woodpigeon's; while the Kestrel, on the contrary, appears to use an old Magpie's or Crow's nest. The Kestrel is not found in any of the woods at Scremerston itself; but the Sparrow Hawk is not uncommon.

LONG-EARED OWL (*Otus vulgaris*).—This bird is very plentiful in the fir plantations, though there do not seem to be any Tawny or Barn Owls for at least 3 miles round. The general number of eggs in a nest hereabouts is five, which, I believe, is more than usual in other parts. They usually build in old Magpies' nests, preferring those of the preceding year; unless in the case of building year after year in the same nest, which they often do.

The earliest nests are about 28th March, and others may be found as late as the latter part of May.

TAWNY OWL (*Surnium aluco*).—Breeds in Berrington Dean and at Horncliffe and Branxton.

SPOTTED FLYCATCHER (*Muscicapa grisola*).—One pair breeds on

the church at Scremerston, or in the Vicarage garden yearly. I have not seen any other specimens in the neighbourhood.

SONG THRUSH (*Turdus musicus*).—I have often found the nests of this species and the Blackbird built in the ground, sometimes the top of the nest being level with the earth.

SEDGE WARBLER (*Salicaria phragmites*).—This bird builds here at a distance from any water, unless open drains, dry in summer, can be so called; and I have found nests several hundred yards from even these.

N.B.—I have often wondered that there are no Garden or Black-cap Warblers here, though there are suitable places for breeding.

GOLD-CRESTED WREN (*Regulus auricapillus*).—Breeds in the woods both at Scremerston and near Ancroft, but not in great numbers.

GRAY WAGTAIL (*Motacilla boarula*).—This bird breeds near Bowsden, where the nest has been found with young birds.

YELLOW WAGTAIL (*Motacilla flava*).—One was seen at Kyloe some years ago (about 1867).

WHINCHAT (*Saxicola rubetra*).—Fairly plentiful. Breeds here.

STONECHAT (*Saxicola rubicola*).—Breeds on the shore at Scremerston in tufts of heather; at Goswick and Ross Links it is very abundant and seems always to build its nest a foot or so down a rabbit-hole. One nest at Scremerston had five young and two eggs in July—the young were not fledged till August; while other nests were fledged at the end of May or beginning of June.

I have only heard of one Tit's nest of any kind here, in the last 10 or 12 years, and never found one, though the birds (Great Tit, Blue Tit, Cole Tit, Marsh Tit) are common at most times of the year, and I have carefully looked for them.

BOHEMIAN WAXWING (*Bombycilla garrula*).—Several of these birds were shot in the neighbourhood about eight years ago.

BLACKHEADED BUNTING (*Emberiza schaeniclus*).—Builds occasionally on Unthank Moor, and may be seen at Barmoor.

CARRION CROW (*Corvus corone*).—Breeds occasionally in the fir woods, and is common in winter, as also the Hooded Crow.

JACKDAW (*Corvus monedula*).—I have found these birds building in rabbit-holes at Kirknewton. There were quantities of the nests often too deep to be within reach.

MAGPIE (*Corvus pica*).—Seems in nine cases out of ten to build in a Scotch fir, in preference to any other kind of tree.

GOATSUCKER (*Caprimulgus Europæus*).—Has been seen here once, about 20 years ago.

GOLDEN PLOVER (*Charadrius pluvialis*).—Breeds rarely, on wet fields at Scremerston. There was a nest with four eggs on Borewell Farm, in 1871.

RINGED PLOVER (*Charadrius hiaticula*).—I have never seen this bird on the part of the shore nearest to Scremerston; but it occurs in some numbers about a mile south of the Station, and breeds at Goswick where I have found the nest.

OYSTERCATCHER (*Hæmatopus ostralegus*).—Seen sometimes on the shore.

EIDER DUCK (*Somateria mollissima*).—I have found the nest of this Duck on the links at Ross; the Crows had destroyed the eggs. It was in June, 1876.

RAZORBILL (*Alca torda*).—The fishermen at North Sunderland say this species is always driven from the Farne Islands by the Guillemots. However, one pair bred there in 1875; it was apparently the only case. The egg taken was undoubtedly that of the Razorbill.

SHAG (*Phalacrocorax cristatus*).—One pair of these birds (according to the fishermen the only instance for ten years) bred on the Pinnacles, Farne Islands, in 1873. I saw the bird from below on the nest on May 29th of that year.

Lepidoptera.

CYNTHIA CARDUI (*Painted Lady*).—This butterfly was rather common here in 1872, but I have never seen it since.

ANTHROCERA FILIPENDULÆ (*Six-spot Burnet*).—Fairly common on the sea links from Scremerston southwards.

SMERINTHUS POPULI (*Poplar Hawk*).—Found occasionally in the village.

ACHERONTIA ATROPOS (*Death's Head*).—The caterpillars of this moth are found in some numbers by the cottagers at Scremerston; if the year suits, as many as three or four in a small potatoe ground.

SPHINX CONVULVULI (*Bindweed Hawk*).—In 1875, two specimens were taken here, one at the Smithy, the other close to Richardson's Stead. In 1876, a chrysalis was dug up in the Vicarage garden; the moth came out but its wings never expanded.

MACROGLOSSA STELLATARUM (*Humming Bird Hawk*) was seen occasionally in 1872, and one was caught in 1875. All these were in the Vicarage garden.

PYGÆRA BUCEPHALA (*Buff Tip*).—Fairly common in some years, in others not to be found at all.

LEIOCAMPA DICTÆA (*Swallow Prominent*).—One specimen taken in the Vicarage garden in 1875.

CALLIMORPHA JACOBÆE (*Pink Underwing*).—Very common on the links at Goswick, and still more so at Ross.

LITHOSIA COMPLANA (*Common Footman*).—One taken at Scremerston Station in 1875.

TRIPHÆNA FIMBRIA (*Broad Bordered Yellow Underwing*).—One caught at sugar in Vicarage garden, July, 1875; and another on the ground among strawberries, in 1876.

ORTHOSIA LOTA (*Redline Quaker*).—Two at sugar, Vicarage garden, August, 1876.

MYTHIMNA CONIGERA (*Brown Line Bright eye*).—Occasionally seen in the day time.

CALOCAMPA VETUSTA (*Red Sword Grass*).—Two specimens at sugar, Vicarage garden, August and September, 1876.

HAMA BASILINEA (*Rustic Shoulder Knot*).—Fairly common, Vicarage garden.

GORTYNA MICACEA (*Rosy Rustic*).—One specimen in Vicarage garden, August, 1876.

PLUSIA IOTA (*Golden Y*).—Common in Vicarage garden in June.

PLUSIA INTERROGATIONES (*Scarce Silver Y*).—Found by my brother on the Kyloe hills.

CATOCALA FRAXINI (*Clifden Nonpareil*).—One at sugar in Vicarage garden, August, 1876.

CROCALLIS ELINGUARIA (*Scalloped Oak*).—Occurs rarely.

OPORABIA DILUTATA (*November Moth*).—Very common in fir woods and hedges, August, September, etc.

Lepidoptera during 1876. By WILLIAM SHAW.

EYEMOUTH.

- SPHINX CONVULVULI. I have only seen one very much worn.
 SELENE ILLUNARIA. Several specimens. Came to light.
 „ LUNARIA. One specimen. Came to light.
 ACIDALIA INCANARIA. One specimen.
 EMMELESIA ERICETATA. One specimen at sugar. Seabanks.
 EUPITHECIA SUBFULVATA. Two specimens. At light.
 „ CASTIGATA. Several specimens. At light.
 „ NANATA. One specimen. Lauder. A. Kelly.
 „ VULGATA. Several specimens. At light.
 „ ASSIMILATA. One specimen. Lauder. A. Kelly.
 „ EXIGUATA. The most common of our Pugs.
 THERA SIMULATA. Two specimens on seabanks.
 „ FIRMATA. Two specimens. At sugar.
 ANTICLEA BADIATA. Four specimens. At light. Highlaws.
 CIDARIA MIATA. Four. In spring after hybernation.
 „ IMMANATA. Almost as common as *centum notata*.
 PTILODONTIS PALPINA. Bred one from chrysalis.
 ACRONYCTA MEGACEPHALA. One from chrysalis. Poplar.
 GORTYNA FLAVAGO. One at sugar. Netherbyres. R. Lambertson.
 XYLOPHASIA HEPATICA. One at sugar. Banks of the Ale.
 AGROTIS VALLIGERA. One at sugar. Seabanks.
 „ TRITICI. Three at sugar. Seems to be rare.
 „ AQUILINA. One at sugar. Named by J. T. Carrington.
 „ AGATHINA. One at sugar. Seabanks.
 XANTHIA CERAGO. At ragwort. Much paler than English moths.
 CIRRHEDIA XERAMPELINA. One worn specimen at sugar.
 COSMIA TRAPEZINA. One at sugar on seabanks. A curious place for this moth.
 EPUNDA LUTULENTA, VAR. LUNEBURGENSIS. Three at sugar, named by Mr Carrington, who says the Berwickshire ones were very fine.
 CALOCAMPA VETUSTA. One at sugar. Seabanks.
 STILBIA ANOMALA. Three. One male and two females. Sugar.
 CATOCALA NUPTA. About the end of August, when sugaring on our seabanks, I captured a fine specimen. There were several

willow bushes not far from the place, on which the caterpillars most likely fed.

CATOCALA FRAXINI. About the 9th of September, when sugaring near Netherbyres, I was very much surprised to see one of this rare moth. It was sitting with the forewings arched upward, touching each other at the tip, and the hind wings spread backwards and pressing against the tree, giving this moth a most peculiar-looking appearance. Both the hind wings were badly torn, but the front wings were pretty perfect. There are plenty of old ash trees near, and the banks of the Eye are wooded for about three miles upward, so that it may have been bred further up.

EUCLIDIA GLYPHICA. Flies in sunshine, difficult to take.

AGLOSSA PINGUALIS. Common in stables.

ENNYCHIA CINGULALIS. One. On seabanks.

BOTYS VERTICALIS. Common on nettle.

PIONEA FORFICALIS. Common near gardens.

SCOPULA LUTEALIS. Seabanks; common.

„ OLIVALIS. Common near Dogs Mercury.

STENOPTERYX HYBRIDALIS. Lauder. A. Kelly.

SCOPARIA AMBIGUALIS. One specimen.

„ ZELLERI. One specimen.

„ DUBITALIS. One specimen.

CRAMBUS PRATELLUS. Common.

„ TRISTELLUS. One specimen.

„ CULMELLUS. One specimen.

„ HORTUELLUS. One specimen.

ONCOCERA AHENELLA. One on seabanks.

MILIA SOCIELLA. Three, not so rare.

TORTRIX ROSANA. Several.

„ HEPERANA. Not uncommon.

„ RIBEANA. Common.

„ FAVILLACEANA. Not common.

EUPICELIA ANGUSTANA. One.

XANTHOSSETIA HAMANA. Not uncommon.

ARGYROLEPIA CNICANA. Seabanks near thistle.

DIURNEA FAGELLA. Very abundant.

TALEPORIA PSEUDO-BOMBYCELLA. One specimen.

PLUTELLA PORRECTELLA. One specimen.

„ ANNULETELLA. One specimen.

PLUTELLA DALELLA. One specimen.

DEPRESSARIA COSTOSELLA. One on oak.

„ LITURELLA. One.

„ ARENELLA. Several.

„ ALSTRÆMERIELLA. One.

„ APPLANELLA. Common.

DASYCERA SULPHURELLA. Under bark.

CECOPHERA PSEUDOSPARETELLA. Common.

PTEROPHORUS TEPHRADACTYLUS. Several.

„ MICRODACTYLUS. Common.

ALUCITA POLYDACTYLA. Common near honeysuckle.

ORTHOETENIA ANTIQUANA. About the end of April, 1876, when digging in the garden, I noticed the roots of *Stachys palustris* very much swollen. Breaking one or two across, I found they were mined by a small white larva. I kept several of them in a tin box, where they remained until they were full-fed; this was about the end of May. Then they came up to the lid of the box, where one of them spun a whitish web, but not finding it to their taste they all went down again among the roots, some spinning among the roots, others sealing up the end of the mine in the roots with silk. The perfect insects came out in June. I fancy the moth will lay its eggs in June or July, and the young caterpillars will mine down the stem into the roots, wounding them and causing a partial thickening, in the same way as *Pterophorus microdactylus* wounds the stem of hemp agrimony*; they must feed slowly during the winter months, as it is late in spring before they are fed up. Merrin gives *S. arvensis* as its food-plant, but *S. arvensis* is an annual, and is a seed all the time the larva of *O. antiquana* is feeding.

[* It is to be hoped, that the author does not confound the natural tubercular swellings on the roots, with injuries produced by the caterpillar which mines them.]

Lepidoptera for 1876. By SIMPSON BUGLASS.

AYTON.

SESLIA APIFORMIS. I got two specimens of this moth in Ayton woods.

CHELONIA PLANTAGINIS. One specimen of this was got in the village here.

LIPARIS CHRYSORRHŒA. This was taken last year, instead of *Liparis Salicis* returned as taken.

ORGYIA ANTIQUA. I bred a great quantity of this moth from the eggs I got last year in Ayton woods.

SELENIA LUNARIA. One bred from the chrysalis got here.

GEOMETRA PAPILIONARIA. I have one specimen of this rare moth which was taken by Mr C. Watts, Ayton. Ayton woods.

ACIDALIA BISETATA. Ayton woods.

CABERA EXANTHEMARIA. Ayton woods.

HYBERNIA RUPICAPRARIA. Very plentiful here.

ANISOPTERYX ÆSCULARIA. Ayton woods.

EMMELESIA ALCHEMILLATA. Ayton.

EUPITHECIA CENTAUREATA. I got one of this on seabanks. Burnmouth.

EUPITHECIA VULGATA. Ayton Castle.

EUPITHECIA TENUIATA. Ayton woods.

THERA SIMULATA. Seabanks. Burnmouth.

CIDARIA CORYLATA. Ayton.

CIDARIA SUFFUMATA. Peelwalls. Ayton.

CHESIAS SPARTIATA. Very plentiful at Broom. Ayton.

DICRANURA FURCULA. I have got two very fine specimens of this rare moth, taken by Mr Alex. White, Ayton.

NOTODONTA DICTÆA. I have one very fine specimen of this rare moth got from chrysalis. Peelwalls. Ayton.

NOTODONTA ZICZAC. One good specimen bred from chrysalis taken at Peelwalls.

DILOTA CÆRULEOCEPHALA. At light at Ayton Castle. The first taken here.

ACRONYCTA MEGACEPHALA. I have one specimen. The caterpillar was got at Preston, by Mr C. Watts.

LEUCANIA COMMA. Common. Ayton woods.

HELIOPHOBUS POPULARIS. Two specimens, Came to light at Ayton Castle,

CARADRINA MORPHEUS. I have taken four good specimens of this. Ayton.

CARADRINA BLANDA. Wood-sage on seabanks. Burnmouth.

AGROTIS PRÆCOX. I got a very fine specimen of this rare moth at sugar. Ayton woods.

AGROTIS CORTICEA. Two specimens got at sugar. Ayton woods.

NOCTUA DAHLII. I got eight specimens of this at sugar. Ayton woods.

ORTHOSIA SUSPECTA. I got a few of this local moth at sugar. Ayton woods.

ANCHOCELIS RUFINA. At sugar. Ayton woods.

XANTHIA CERAGO. I got a good series of this moth at ragwort. Ayton woods.

CIRRHÆDIA XERAMPELINA. I got three good specimens at sugar. Ayton.

EPUNDA LUTULENTA. One specimen was taken at sugar. Ayton woods.

HADENA ADUSTA. Ayton woods. Not common here.

HADENA PISL. At sugar. Ayton.

CUCULLIA CHAMOMILLÆ. I have one specimen taken by Mr Wm. Cumming, Ayton Castle.

STILBIA ANOMALA. I have taken four of this moth at sugar. Ayton woods.

HALIAS PRASINANA. One good specimen also taken at sugar. Ayton woods.

Notice of Ancient Burial Urns found in Roxburghshire.
Communicated by THOMAS CRAIG.

It may safely be said that the people of this generation have much greater and exacter knowledge of the ancient inhabitants of Britain and of the Roman invaders, than those who lived centuries nearer their time. Almost every day adds to our knowledge of the manners, customs, doings, and capabilities of these peoples, and it would be vain to venture to fix any limit to the amount of knowledge that may yet be gained. One thing is certain, that a much greater value is generally set upon anything

which it is known their hands have handled or fashioned, that, may now be brought to light, than was the case not many years ago, and there is the greater likelihood not only of their being preserved in private collections or in public museums, but of their being duly recorded in some printed repository, where particulars of them will be accessible to the student of ancient history or to the local historian. The parishes of Yetholm, Morebattle, and Hownam have yielded not a few treasures of this kind, though the recent great find of Roman coins at Chollerford throws lesser discoveries temporarily into the shade. Yet the funeral rites and customs of the ancient inhabitants of the Border district have an interest of their own, which is enhanced by the recent discussions, investigations, and experiments among certain "advanced" personages who have challenged the advantages and propriety of the ordinary form of interment as against cremation. As is well known, the parishes named contain many Ancient British and Roman camps, besides other traces of the olden inhabitants, including the great Watling Street. Vast tracts of this territory being in permanent pasture, which is seldom disturbed by spade or plough, it may readily be conjectured that when the turf is turned up the workmen should now and then come upon traces of the ancient people. Not a few of these have unfortunately been unwittingly destroyed, and of many more, it is feared, no record has been preserved. Lest all knowledge of three urns, discovered in Morebattle and Hownam parishes should perish, they are now recorded in these pages.

I.

In the beginning of November, 1874, a burial urn was exhumed on the grounds of Elliesheugh,* now incorporated with

* Elliesheugh, under the spelling of Hulaweshou and other modifications, appears frequently in old charters, in one of which, according to Jeffrey (*"History of Roxburghshire"*) "all Hulcheshou, in wood, plain, and pasture," was made the subject of a grant. In 1545, Esheughe (Elliesheugh) was one of the many "towns" in Bowmont water destroyed by Hertford. A local saying—supposed never to have been in print—was at one time very popular, that

"The lang Gaunts of Elliesheugh
Were heard at Blackden lane."

Oral tradition affirms that the saying originated in the circumstance of a noisy family of the name of Gaunt having at one time lived at Elliesheugh ;

the farm of Cliftoncote, in the parish of Hownam. Unfortunately, however, the workman's pickaxe reduced it to small fragments, before he was aware of the rare and valuable remains upon which he had accidentally alighted. But some of the pieces of the urn were of a size sufficient to give some indication of its original dimensions and character. An examination of the fragments led to the conclusion, that the urn was of about eight inches in depth, and about twenty-four inches in diameter. At the top was a rim about three inches broad, scored in such a way as to make it difficult to say whether the marks shewed method or the want of it. Lower down there was another band of nearly equal breadth, upon which the marking was less elaborate; and toward the bottom there was no tracing or attempted ornament of any kind. The upper edge was indented with small round holes, for what purpose is unknown. The inside had similar indentations. The material used in its fabrication seems to have been the clay of the district, and the vessel shewed little skill on the part of the potter. It contained a quantity of bones, presumably human, which were much decayed; but whether they bore any signs of the action of fire it is not possible now to say. The urn was found in the solid rock scarcely covered by the soil, but a cavity of about two feet had been scooped out for its reception. The fragments of this curious cinerary urn, if it may be so called, were presented to Kelso Museum.

II. and III.

These urns were discovered in the same district of country upwards of seventy years ago, and might have been entirely lost to history had the fact of their being found, with a description of them, not been communicated to the *Kelso Mail* at

though in the lapse of time, many supposed it to mean the "lang gaunts" (yawns) of an unusually sleepy hamlet population. [This proverb is one of those applied to localities with similar names, on both sides of the Borders. In the late Mr Denham's "Folk Lore of Northumberland," the version is, "The lang gaunts o' Elishaw were heard 'm't loans o' Blakelaw." It is now spoken of in deriding lovers' sighs. Mr Arkle, of Highlaws, who communicated it, notes a variation: "The lang *guns* o' Elishaw," &c. The country opinion was, that it related to "some feud in which the people of Elishaw took terrible vengeance on the folks o' Blakelaw." Elishaw, or shortly 'Lishaw, is in Redesdale. Blakelaw's Law is a hill near Elishaw, on the opposite side of the Durtree Burn. Mr Arkle has also heard the same saying about two places on the Tweed.—J. H.]

the time. If they are still in existence, it is not publicly known who possesses them. The record in the *Mail*, which appeared in the number for November 4, 1802, is as follows:—"There was found, a few days ago, by some workmen employed to dig up stones, not far from the public road between Belford and Hownam-Kirk, two urns, resembling the ancient Roman urns, but fabricated of much coarser materials than those of Herculaneum, now exhibited in the British Museum. One of them is a good deal smaller than the other. The largest was filled with bones, which had been broken or beat to pieces. Parts of the skull were very discernible. The smaller one also, in all probability, had contained bones, as a small piece of bone was observed near the mouth of it, though, when found, it was full of black earth, laying on one side, probably moved by some accident from its first position; as the other, full of bones, was placed horizontally, with its mouth undermost. They were found not far from the surface of the ground, deposited under a heap of stones, regularly built around them, and which occasioned a small rising in the ground. This tumulus seems to be nearly at an equal distance between the remains of two ancient camps, one of which is situated in the parish of Hownam, and appears to have been strongly and regularly fortified with three rows of deep trenches facing to the north, with fences of wall towards the north. This place of strength is only three miles distant from the Roman road."

Notices of Arrival of Birds, &c., at Weetwood Hall. By
MR R. G. BOLAM.

	1875.		1876.
Sand Martins	- April 17	-	April 3—NOTE A.
Sand Pipers	- „ 25	-	„ 23
Redstart	- „ 25	-	„ „
Cuckoo	- „ 25	-	„ 30
Wheatear	- „ 24	-	„ 1—NOTE B.
Corn Crake heard	-	-	May 8
Hawthorn in blossom,	May 8	-	„ 21
Green Sand-Piper on Till banks		-	March 28
Redshank on Till banks in July,	several times.		

A. Sand Martins appeared on 3rd April (Doddington Lane), but cold weather coming, they disappeared; and I did not notice them again until 24th April, at Rothbury, and 25th at Weetwood Bridge.

B. I noticed the first Wheatear on 1st April (Whitsun Bank); but not again until the 25th, near Bell's Hill, after which they were plentiful.

List of a few captures of Coleoptera in East Lothian. By
ARCHIBALD BUCHAN-HEPBURN, Esq.

- METABLETUS FOVEOLA, *Gyll.* Dunbar links, not uncommon.
 POGONUS CHALCEUS *Marsh.* Common at mouth of Tyne.
 PRISTONYCUS TERRICOLA, *Hbst.* Occasional on sea shore.
 ANCHOMENUS JUNCEUS, *Scop.* Occasional on banks of Tyne.
 DICHIROTRICHUS PUBESCENS, *Payk.* Common in company with
Pogonius chalceus at mouth of Tyne.
 CILLENUM LATERALE, *Sam.* Occasional at mouth of Tyne.
 BEMBIDIUM RUFESCENS, *Dej.* Rare in dead wood near Hailes
 Castle.
 MYRMEDONIA CANALICULATA, *Fab.* Occasional in ants' nests.
 LAMPRINUS SAGINATUS, *Grav.* April, one specimen under stone
 on Dunbar links. This insect has only occurred on one or two
 occasions in Scotland, having been taken by Dr Sharp on the
 Nith. It is also rarely found in England.
 BOLITOBIUS ANALIS, *Payk.* Dunbar. Not uncommon.
 MYCETOPORUS NANUS. Salt marsh, mouth of Tyne.
 PHILONTHUS FULVIPES, *Fab.* One specimen, banks of Tyne.
 BAPTOLINUS ALTERNANS, *Grav.* Curious variety, uniform pale
 yellow, showing no traces of the dark bands on the abdomen,
 the head alone being slightly darker.
 DIANOUS CÆRULESCENS, *Gyll.* Abundant at Presmennan lake.
 STENUS BIMACULATUS, *Gyll.* Occasional on banks of Tyne.
 STENUS CINERASCENS, *Erich.* New to Scotland; one specimen
 banks of Tyne.
 STENUS IMPRESSUS, *Germ.* One specimen in garden refuse.
 BLEDIUS SPECTABILIS, *Kr.* A few specimens in salt marsh at
 mouth of Tyne.
 ÆGIALIA SABULETI, *Payk.* Very local, but abundant; banks of
 Tyne.
 MELANOTUS FULVIPES, *Herbst.* I took one perfect insect, and
 four or five larvæ, all of the latter coming to maturity. When
 found they were feeding on rotten birch wood.
 CAMPYLUS LINEARIS, *Fab.* Occasional in dead willow.
 CORYNETES RUFICOLLIS. Occasional in carrion.
 TETRATOMA FUNGORUM, *Fab.* Rare in fungi.
 RHINOSIMUS RUFICOLLIS and RHINOSIMUS PLANIROSTRIS, by
 sweeping under oaks.

Notes on Birds observed in North Northumberland. By T.
H. GIBB, Alnwick.

LITTLE AUK (*Alca Alle*).—Vast numbers of these birds visited the Northumbrian coast during the autumn of 1876. They do not generally migrate so far south, being birds of strong northern proclivities; and doubtless those birds that reach our shores are never willing visitors, but are carried hither by circumstances over which they have no control. For the most part, those captured here were in a deplorably thin condition, and many of them were found in very strange localities; one was observed disporting in a pool in a quarry situated many miles from the sea; another was seen paddling along the deep waterfilled ruts of a rough country road; whilst the beagles of Mr J. J. Horsley, of Alnwick, during a run with a rabbit, caught one in a field huddled together in a tussock of grass. Many specimens have also been seen and taken in other inland localities; and at the same time they have been very plentifully and widely dispersed along our seaboard.

WILD DUCK (*Anas Boschas*).—I never remember having seen larger flocks of Wild Ducks than I observed whilst the north-east gales raged so fiercely towards the close of last year. They left the bleak and exposed coast in large numbers, and betook themselves to inland rivers and ponds for shelter and security. After the subsidence of the storms, numerous flocks were to be seen making seaward again.

EARED GREBE (*Colymbus auritus*).—A male was shot in the estuary of the river Aln in December last, and was of course in its full winter dress. A few are to be found every winter.

TUFTED DUCK (*Anas fuligula*).—A male was captured near Longframlington. This bird is only an occasional visitant, and at no times numerous.

LONGTAILED DUCK (*Anas glacialis*).—Large numbers of these birds located themselves in the neighbourhood of Fenham Slakes and Holy Island, where they are called “Jacky Forsters” by the fishermen. The fully matured male bird of this species is not often met with; as the females and immature males, which in many cases seem to be in the exact plumage of the other sex, greatly preponderate in numbers.

The same thing may be said of the

GOOSANDER (*Mergus merganser*), for out of twenty of these birds not more than one matured male on the average will be found. A fine fully matured male with the salmon colour of its breast at its greatest perfection, was shot on the river Coquet.

STOCK DOVE (*Columba Œnas*).—Several Stock Doves have been observed in the vicinity of Alnwick. They were associating with the Woodpigeons, which arrived here in countless numbers during the early part of January; from which it may be inferred that they too must have crossed over the north seas from Norway and elsewhere, to find a more congenial habitat here. They are easily distinguishable from their congeners by their smaller size; their more rapid and elevated flight; as well as by their more graceful movements.

THE ROCK DOVE (*C. livia*), has never come under my notice, not at least in its normal state; for the few so-called Rock Doves which frequent some of our rocky headlands, have been so crossed and recrossed with the domestic Pigeon, that they have quite lost their individuality.

STARLING (*Sturnus vulgaris*).—Of late years Starlings have greatly increased in numbers; and being gregarious in their habits sometimes the flocks have been very large. I observed one, which I computed to contain many thousands of birds. This flock was made up every evening, by detachments varying from a few individuals to as many hundreds, pouring in to a chosen rendezvous at the close of the day. The first flock or company, and this was always under the guidance of some chosen leader, whose will to the rest seemed perfect law, generally arrived about two hours before sunset, and speedily selecting a roosting place for the night, alighted. This was quickly followed by a succession of fresh arrivals; until at length a vast and bustling multitude had congregated together; the loud screaming and chattering of which produced a strange but pleasing harmony of sounds. This concert continued till darkness finally set in, and then began to subside, but in a very gradual manner—I presume, by reason of the sleepy-headed members of the community placing their heads underneath their wings, while the more wakeful spun out their cadence to the dying day. On the following morning the birds departed in one body; but in the evenings they never failed to arrive at their roosting place in isolated detachments. These movements I saw repeated

several times; for they remained for a long time in the same locality.

RED WINGS (*Turdus iliacus*) and FIELDFARES (*T. pilaris*) have been comparatively scarce. Usually they visit us in large numbers, our hedgerowed and coppice-filled country seeming to suit their tastes. In a few short notes which have previously appeared in the Proceedings of the Club, I adverted to the greater susceptibility of the Fieldfare and Redwing to the cold and privation which follow in the wake of a snow-storm, than are the congenerous species indigenous to this country. Since then, I have had many opportunities of examining into the cause of this; and I am of the opinion that it arises from the inaptitude of comparative strangers in discovering the snails and larva of insects, which form a great part of the food of our local birds during severe weather. I never remember having seen either the Redwing or Fieldfare feeding on any of our *Helicidæ*; while our indigenous Thrushes may often be seen securing a dainty meal from this source; securing such, no doubt, from having a better knowledge of their habitats, than can possibly be accorded to birds which are so absolutely migratory in their habits, and remain for no lengthened period in one locality.

ROOK (*Corvus frugilegus*).—I have frequently been much amused in watching the Rook during the season of nest making, and noting how prone they are at such times to pilfer the materials of their neighbours' nests. I observed one, last spring, most persistent in this habit; for though he was again and again chased away by the victims of his dishonesty, he ever and anon, as an opportunity offered, made another attack. How long this lasted I cannot say, but about a week afterwards I found little or no trace of the nest left; from which I concluded that either the rogue had carried it off *holus bolus*, or that the owners had themselves transferred it to some place of safer keeping. I have observed that Rooks do not in all cases remain at their own rookeries to roost throughout the entire year; and many extensive breeding places, notably that in Hulne Park, near Alnwick, are all but deserted by the birds during the winter months, whereas the colony in Trickley Wood, on the Chillingham estate, and others that might be mentioned, are usually more than trebled during that season; the increase evidently being made up of birds bred elsewhere. Towards spring all

these recreant birds again draw in to their old homes, for the purpose of nidification. During the winter evenings, large flocks may be seen passing the breeding place in Hulne Park without recognition, *en route* for the west, and on the following morning may be observed repassing it in the same way, as they hie on to their day's foraging ground.

MOUNTAIN FINCH (*Fringilla montifringilla*) and SNOW BUNTING (*Emberiza nivalis*) arrived here at their accustomed time, but not in such large numbers as I have sometimes seen, yet the flocks in some localities were large, and enlivened the scene not a little by their erratic yet pleasing movements.

LONG-TAILED TITMOUSE (*Parus caudatus*).—Deep in some of our secluded woods, I have observed a few flocks of these tiny items in our fauna, rollicking and chattering and climbing and fluttering in every conceivable position, amid the upper branches of the forest giants, as they hurried along in their search for insect life; whilst, as is usual, several members of the inquisitive and pert little BLUE TIT (*P. cæruleus*) accompanied them in their course.

GREATER TITMOUSE (*Parus major*).—This bird is now seldom seen. Not many years ago they were, if not abundant, at least often to be met with; but I have not observed a single specimen for many months. The COLE TIT (*P. ater*) is also, I think, less numerous; but indeed the same thing may be said of many of our feathered favourites such as the

GOLD-FINCH (*Fringilla Carduelis*), SISKIN (*T. Spinus*), RED-START (*Motacilla Phænicurus*), WHINCHAT (*M. Rubetra*), WHEATEAR (*M. Œnanthe*), and the PIED WAGTAIL (*M. Yarelli*), in all of which I regret to say a marked diminution in their numbers has taken place. Doubtless drainage and the reclaiming of waste lands has much to do with this; and to such an extent have these things acted upon the natural economy of some of our indigenous birds, that their appearance now is hailed as the advent of a *rara avis*.

The JAY (*Corvus glandarius*) and the MAGPIE (*C. pica*) and many of our Falcons are now almost things of the past; but their depopulation may be attributed in a great measure to other causes, namely to the indiscriminate, and I may say ruthless, slaughter by gamekeepers. *En passant*, might we not question the wisdom of the wholesale destruction of our rapacious birds; and ask at the same time if the alarming increase in the number of rats—

an element in my opinion very destructive to our game birds—may not be attributed to the deplorable decrease of our birds and animals of prey.

KING FISHER (*Alcedo Ispida*).—I am inclined to believe that this bird, which, for beauty of plumage, can bear comparison with many of the gorgeously attired inhabitants of tropical climates, is far more numerous than it is generally supposed to be. It is a most retiring and solitary bird; and moreover possesses no small amount of cunning and precaution; and is thereby enabled to remain without being much observed in its chosen retreat. For the last ten years there has generally been a nest or two on the Aln; and yet I have known men who have frequented the river regularly during the whole of that period, who have not, in all that time, had a single glance of the Halyon fisher; and no doubt this is owing to the bird's habits, for as soon as his privacy is invaded, he is either off like a flash of light, covering his retreat by some projecting rock or bank; or else he quietly ensconces himself in some river-side thicket, if such be at his command; either of which stratagems he so adroitly performs, that to a casual observer, his proximity is never thought of. I have frequently marked a Kingfisher into an alder by the river side; and, although using every effort to dislodge him, have as frequently failed. I remember some years ago marking one into a willow bush, where the shelter seemed so scant that I thought I should have had no difficulty in turning him out, but after repeated efforts completely failed. It so happened, however, that a sharp shower of rain began to fall, and I took shelter underneath an adjoining tree. There I remained for at least half-an-hour; all the time watching the hiding place of the bird. At the end of that time, the shower passed off, and, as if actuated by a simultaneous impulse, as I stepped out from my shelter, so also the Kingfisher emerged from his, and took wing up the stream, uttering as he flew that shrill cry, which, once heard aright, is never afterwards mistaken for the flight-note of the Water Dipper; which in many respects it closely resembles. During the summer of 1876, I frequently observed the Kingfishers on the river Aln. Their note I oftener heard, and also the sharp whir of their wings, as they flew unobserved in their usual cautious and cunning way, from the alder thickets.

WATER DIPPER (*Sturnus Cinclus*) is a permanent resident on the

Aln, and the various rivulets that intersect the county. Its nest, notwithstanding its great dimensions, is composed of materials which so nearly resemble the objects around it that it is very seldom found. Though more sober in colour than its river-side companion, the Kingfisher, it is by far the most interesting of the two birds. The latter by his meteoric-like splendour, as he shoots momentarily past you, creates in the beholder more surprise than admiration; but the former, in his modest dress, cheers you with his lively presence, as he darts in and out of the limpid element, that for ever dashes over the rocks of his native glen; and in the depths of winter when the songs of all other birds are hushed—the Dipper's ditty enthrals you with its sweetness.

WOODCOCK (*Scolopax rusticola*).—This bird often remains to breed here. In Hulne Park, which is strictly preserved, a few pairs remain to nest every season; and during the summer evenings, in particular localities, they may be seen very frequently as they issue forth for their crepuscular and nocturnal excursions; at any rate they have very often come under my observation at such times. Last season a pair formed their nest on the outskirts of a wood near to Filberthaugh Bridge; and when discovered it contained four eggs. It was placed amongst a lot of dry and withered leaves; and so closely did the eggs and the birds themselves approach to them in colour, that it required a very close search indeed to find the nest out. The birds sat very closely and were often touched with a stick before they could be induced to take wing. Woodcocks were very numerous here in 1875 and 1876, but remained for a very short time near the coast; dispersing inland with greater haste than usual. I flushed one during the above period in the centre of a large break of heather, dry and crisp from its elevated situation—a curious refuge I thought for a lover of wooded hill sides and low lying shades, many of which existed not far off.

GREEN SANDPIPER (*Tringa ochropus*).—I observed one of these birds on the river Aln, in the autumn of 1876. It rose warily on the wing, and but for its harsh note and erratic flight I should have taken it for the common species. It is a very occasional visitant with us; northern Europe being the great breeding rendezvous of this species. Yet a few remain in this country to nest; and doubtless those birds which crop up now and again in the autumn, are either birds of the season bred in this country, or those that have remained here for nidification.

THE COMMON SANDPIPER (*Tringa hypoleucos*) is widely dispersed throughout Northumberland; almost every stream being peopled by them from well nigh its source to its confluence with the ocean. I have observed how careful the old birds are of their nest; and how persistently they will endeavour to lure you away from its proximity; exemplifying therein as much forethought and intuitive wisdom, as is shewn by the Partridge or Lapwing, birds pre-eminently clever in this trait.

THE TREE SPARROW (*Fringilla montana*) is but seldom met with, and I cannot say whether it breeds in Northumberland or not; for no specimen has come under my notice, except during the winter months. As might be supposed it appears not to court the company of *F. domestica*; usually preferring the companionship of the finches. One was killed a few days ago near Eshot Brooks, by Mr Longstaffe, out of a large flock of Mountain Finches and Green Linnets.

HONEY BUZZARD (*Falco apivorus*).—During the spring of 1876, one of these comparatively rare birds was shot near Felton. When first seen it was hovering over a dying lamb, but not probably with any intention of preying upon it; as it appeared simply to be attracted by the sick animal's bleating wail. Some observers think the Honey Buzzard the commoner bird amongst its congeners; but, whatever it may be in other parts of our land, in Northumberland it is certainly not so, for here it may be described as one of our rarer falcons.

ROUGH-LEGGED BUZZARD (*Falco lagopus*).—A large number of these birds arrived here during the autumn of 1876; many of which remained with us for a lengthened period. One haunted the river Aln for several weeks, and afforded me many opportunities of observation. On one occasion I obtained a splendid view of this bird. It sprang rather warily from the ground as I approached, and flew at once to a tall hedge not far off, from which vantage ground it eyed me keenly. Not satisfied with its safety, it again took wing, and rising in graceful spiral curves in the air till it attained no mean elevation, and then stretching away westward it settled on an ash tree. Though lacking the dash and boldness of many of the Raptores, this Buzzard is very majestic in its flight; and when soaring aloft during its hunting expeditions, few objects in bird life are more beautiful. Several specimens have been captured; one near to Felton by

the keeper of Mr Riddell, another was killed near Amble, and a very fine male was shot close to the village of Warenford. On dissecting this last bird, I found in its œsophagus the remains of a full grown stoat, which not being subjected to the influence of decomposition, I was induced to examine, and found covered with wounds inflicted, to all appearance, during life. But whether the Buzzard, to whom cowardice is generally attributed, had had boldness to attack an animal proverbial for its courage and audacity, and also to defeat it, is a matter of mere conjecture; and does not at all affect the curious fact of so unsavoury a morsel having been found swallowed by a bird, which as a rule, prefers and generally procures daintier tit-bits.*

HEN HARRIER (*Falco cyaneus*).—An immature male, in nearly the exact plumage of the female, was shot on the moors at Rosebrough, in the spring of 1876. The Harriers are rarer than either the Rough-legged or Common Buzzards; indeed it is very seldom that they are either seen or captured. Formerly, however, when large tracts of furze-covered moorlands and bogs were more numerous than now, they were quite common, and regularly nested on Alnwick Moor, as also did the Kite, *Falco milvus*.

GREY SHRIKE (*Lanius excubitor*).—This bird, rapacious as many of our falcons, visited us in large numbers during the winter of 1875 and 1876. They appeared first on our sea board, but soon afterwards dispersed inland. A considerable number remained for some time on Holy Island, and during their sojourn there many were shot by the inhabitants, but, unfortunately, none of these were preserved. A male was captured at Rosebrough, and another specimen was seen near Alnwick.

SHORT-EARED OWL (*Strix brachyotos*).—During the gales which prevailed in October and November last, a vast number of these birds arrived on our coast. As many as nine birds were shot by a party of shooters in one week, in the neighbourhood of Fenham Slakes. It has been no uncommon thing to see so many together, as to lead one to believe that they are occasionally gregarious in their habits; but the cause of this, no doubt, arose from the large flight of birds to our shores, rather than to any tendency to such a proclivity. For the most part they seldom left the bents and

* Mr Hancock, "Birds of Northumberland and Durham" p. 5, records having taken the greater portion of a stoat out of the crop of a Rough-legged Buzzard.—J. H.

the turnip fields lying contiguous to the coast, although no small number were observed further inland. I had an opportunity of examining many specimens, and found a marked difference to exist both in size and colour. The females I found a little larger than the males, and in many instances much brighter in hue. This last feature, no doubt, arose from the age of the respective birds; the fully matured female being richer in tint than the immature male, and *vice versa*, the latter when fully matured being brighter than the former. The facial disc also varied considerably, being much more prominent in some specimens than in others; while the auricles were in one quite conspicuous, in another scarcely discernible; results which may arise from the nervous temperament of the birds when killed—and the contraction or expansion of the feathers depicting the suddenness or otherwise of death—circumstances which may have been the reason why the species has been multiplied by some observers. I was much struck with the absence of food in the stomachs of those birds that I examined; but in one or two cases I found the remains of finches.

As I am writing this, a very fine

PEREGRINE FALCON (*Falco peregrinus*) has reached me, and I have it before me now. It is a female, and one of the finest specimens I have seen. Its length from tip of tail to bill is 19 inches, expanse of wings 3 ft. 6 inches, weight 2 lbs. It was shot yesterday, the 12th inst., by the gamekeeper of Mr Moffat, of Beanley, in a wood contiguous to the river Breamish, while in the act of pouncing upon a Wood-pigeon. This capture reminds me that another specimen of this noble bird was killed in the spring of 1876, in Hulne Park.

T. H. GIBB.

Alnwick, March 13th, 1877.

On some of the Birds of Lauderdale. By ANDREW KELLY.

FALCO PEREGRINUS.—Mr Walter Simson says that forty years since, a clocker and birds were picking some porridge, which had been given them before the door of Longcroft farm house, in Lauderdale, when a Hunting Hawk swooped down the glen, and alighted about a yard distant from them. The chickens took to flight, but the hen, which had before this fought many a hard battle with cat and dog, stood firm in defence, and struck the hawk a blow with such force, that it died almost instantaneously. The hen ever afterward, in memory of her feat, received the name of the "Eagle killer." In January, 1877, a Peregrine came sweeping over the Lammermoors towards Blythe edge, just as Mr Scott was firing amongst a covey of red grouse. It darted on one of the falling birds, but seeing it lifeless on the ground, without receiving the death-blow from itself, it became dubious, and hurried off before a shot could be fired to arrest it. On another occasion, in Lauderdale, in 1870, while a small party of ducks was moving about in a pond, a Peregrine dashed amongst them, and struck one so forcibly with its talons, that both captor and victim went out of sight in the water. The hawk made its appearance first, gasping and plunging deep in the water; and it was only by making one or two strenuous efforts, that it got to the side, more dead than alive.

FALCO TINNUNCULUS.—Never plentiful. I was rather surprised to see one trapped at a dead rabbit.

BUTEO VULGARIS.—Two specimens of the Buzzard occurred in Lauderdale during the winter and spring of 1876. One was seen some weeks in the district before it could be trapped or shot. The other, evidently its mate, was taken late in the spring, at eggs. This was an elegant bird, with plumage of the very darkest brown; its head and neck purple. In January, 1877, Thomas Riddell saw another Buzzard on Blythe edge.

BUTEO LAGOPUS.—Mr Scott trapped a male specimen of the Rough-legged Buzzard, Feb. 13th, 1877. He first noticed it in the Park field near Edgarhope, while it was eating a rabbit. It was attended by two Peregrines, which kept in the background. The Buzzard was the first aware of Mr Scott's intrusion, and moved off to the shelter of an adjacent wood; and the falcons withdrew in a different direction to wilder retreats. To secure

the Buzzard, traps were set at the remains of the rabbit, and others, in likely places, were baited with rabbits and pigeons; but it was a fortnight before it was secured at its old prey.

When caught it measured as follows:—Extent of wings, 51 inches; length, 21; wing from flexure, 17; bill along the ridge, $1\frac{1}{4}$; tarsi, $2\frac{1}{2}$, completely feathered; middle toe, $1\frac{1}{4}$; claw, $\frac{1}{2}$; 1st feather of the wing, 3 inches shorter than the second; 2nd, $1\frac{3}{4}$ shorter than the third; 3rd, $\frac{1}{2}$ shorter than fourth; the 4th the longest. Head and neck gray, a broad patch of very deep brown on the breast (comes down to the legs), all the upper parts dark and light brown; tail 9 inches, 4 of which are pure white from the root downwards, the remaining 5 inches brown—a princely bird.

CINCLUS AQUATICUS.—I have heard it several times reported, that the Water Crow never builds a nest without incorporating one or two oak leaves in the structure. To be certain, I have examined several nests in this locality, and had the pleasure of noticing the *charm* in them all, sometimes two leaves, but never more than three; the rest being mostly of the beech; and I may say that one or two of the nests were in places where the oak trees preponderate, and the result was the same. In a nest, which I examined in the Routing-linn, Lauder, where there was neither oak nor beech growing, the leaves of both were represented.

TURDUS MERULA.—A Blackbird's nest was found by George Broomfield in a hedgerow near Blackshiels, having four young ones, three of them being pure white, and the fourth pure black. The discoverer had them removed to his own home; and six months afterwards sold the white trio for three guineas.—Albinism is not rare among the Ring-ouzels and the Fieldfares. As an instance of melanism, I have this year, 1877, once or twice seen a pure black Sparrow.

SYLVIA ATRICAPILLA.—This warbler, although far from being rare in the south and east of Berwickshire, was a perfect stranger to Lauderdale till last year, when Mr Scott found in the policies of Thirlstane Castle a dead specimen which had been entangled by the feet amongst some wool. No mate was then or afterwards seen. The great barrier to small birds of this kind getting into Lauderdale is that treeless extent between Dunse and Lauder.

SYLVIA SYLVICOLA.—These gay birds, the Wood Warblers, are very plentiful in the old fir woods, at the Luggy, near Lauder.

ANTHUS ARBOREUS.—The Tree Pipet is perhaps on the increase in Lauderdale. I find it is often mistaken for the Wood-lark, and is familiarly so denominated.

FRINGILLA MONTIFRINGILLA. Mountain Finch. For dissection, two were shot at Newmills, a male and female, from among numerous others feeding in a mixed state with other finches, in a turnip field on which sheep were netted. The contents of the stomachs of both were nearly alike; a great deal of dark looking stuff mixed with corn, and small quartzes. The dark stuff appeared to be oil-cake, which they had probably picked from the sheep boxes; and the corn at the same time. At Lylestone, a few more, in the like society of Sparrows and Chaffinches, were foraging all over the barnyard, when the weather was fine. When the labourers were in hands with the lint at Pilmoor, Mr Wilkie, the manager, said they were for certain doubling their numbers every year. They are very fond too of the small seeds of plants, which they find in stubble-fields. Mr Renton tells me there were hundreds of the Mountain Finch at Threeburnford, near Oxtou, which had fed all the winter amongst the hens.

PYRRHULA VULGARIS.—Bullfinch. Thirty years ago, there was not a Bullfinch in Lauderdale. Now, I am happy to say, they are becoming prevalent. Last year I saw a great number feeding on the seed of the common ling, but haws seem to be their favourite food.

STURNUS VULGARIS.—In the heavy snow storms, last spring, 1876, the Starlings frequented in great bands the places where the sheep had been lying during the night, and eagerly ransacked the melted oval spots cleared down to the soil. If a worm rewarded the search, then the finder commenced pulling it upwards till it was properly unearthed without breaking. Sometimes to accomplish this feat, when the worm was long, the Starling had to stand on its tip-toes, with its neck stretched to the utmost; and when this would not do, I have seen one forced to gain a little more elevation, to mount a stone. During summer, Starlings alight on the backs of sheep to pick off the *kades*, which they eat with great relish. Jackdaws do the same.

TROGLODYTES EUROPEUS.—Should you be wandering in the wildest and out-of-the-way glens in the Lammermoors, you will invariably forgather with the Wren and its great crony, the Water Crow. In one of these glens—Earnsclough—Walter

Simson, in 1830, came across a family party of Wrens, all doing for themselves; four of them were of the orthodox colour, but the fifth, their sister, strange to say, was of a lovely white. A pretty sight it must have been.

ALCEDO ISPIDA.—The Kingfisher nested in the upper district of Lauderdale, in 1871. Since then there has been only one seen. Can the others have been drowned in the spates of the Longcroft water? I have known these birds for long, especially on the Whiteadder; and they never appeared sensibly to have increased or diminished in numbers, although all the time, they nested and brought up their young regularly. My idea is that they have the water portioned off, as it were, into circuits, and none dare inhabit any of these runs, till a vacancy occurs; or they somehow banish their young from the district.

HIRUNDO RUSTICA.—One evening, an angler from Lauder, whilst casting his line into the waters of the Leader, felt a powerful nibble, and then a wobble or two overhead. On looking up, to his surprise, a Swallow was caught by one of his hooks. This piscatorial feat reminds me of another. Professor Wilson, when in the Highlands, writing to James Hogg, says: "I killed nineteen and a half dozen of trouts, and nearly caught a Red Deer by the tail."

CAPRIMULGUS EUROPEUS.—Goatsuckers are very plentiful about Abbey St. Bathans. They seem to have a great liking for the natural woods there, or rather for the abundance of moths which they furnish as a food supply. I have occasionally seen them, hunting, like so many Swallows, the flies amongst the cattle. I have heard it lately asserted, that when they are engaged making their whirring noise, their feet are hooked to a branch, and their bodies are rotating rapidly round like a wheel.

PHASIANUS COLCHICUS.—Some years ago, a Carrion Crow, in search of nests, having scented out a Pheasant's nest in the plantation about Thirlstane Castle, was making it very unpleasant to the sitting bird, when a rabbit-catcher happened to pass. He was going to shoot it, but the Pheasant rushed out upon its dusky tormentor, and a regular struggle ensued, in which the Pheasant came off victor. It fairly danced for joy on the top of the disabled Crow, to which the man of rabbits gave the finish with his foot.

PERDIX CINEREA.—It not unfrequently happens during the

hatching season, when the broods are large, that the male Partridge must provide sleeping accommodation under his own wing, for such of the nestlings as cannot find shelter under the hen. In such cases the pair sit close together, each looking a different way. I recollect seeing pure white broods for many years at Boon and East Mains, Lauder; and when these grew up, these birds all more or less shewed the white feathers, there being some particular beauties with white throats and wings.

CHARADRIUS MORINELLUS.—I formerly noticed the Dotterel as frequenting Lauderdale. I am again told that these birds used to remain for a week or two on all our uplands, when on their way to the north. During that interval, they were eagerly shot for the table. Of late, however, they are never seen, even on the Lammermoors, except at Broadshawrig, a farm belonging to the Earl of Lauderdale, where a few still remain to breed. This is also the sole habitat for the Merlin Falcon, nesting on the rugged heathery braes; and in some measure the Kestrel also.

ARDEA CINEREA.—One day, about a mile above Longcroft, a Heron, hungry from its nest, was watched as it alighted at a small waterfall in a mountain stream, where fishing could be easily obtained; and as the blue feathers afterwards shewed us, this had not been its first visit. We allowed the bird to proceed with its operations for an hour, after which it was shot dead on the wing, and four large trouts were excluded from its throat by the fall, all of them freshly caught. This is its rate of fishing in clear water. But in the case of a spate, when the waters are swollen and drumly, its fare will be greatly augmented, as it then knowingly fishes near the side, where the trouts lie grouped together for shelter in the calm water. Again, when the waters are "fallen in," these birds wading about in the pools, where great numbers of trouts have been thrown in by the storm, devour *ad libitum*. In the spring the Heron resorts to the hills and searches the sheep-drains for frogs, like the Common Hoodie; and in a pinch it preys on rats and mice. Once I saw one commit the fatal mistake of venturing to pick up a Weasel. The Weasel nothing daunted kept wriggling about, till it seized the Heron by the back of the neck, and held on like a bull-dog. The Heron finding itself overmatched, tried to shake off the wicked thing; but this proving ineffectual, it rose far into the air, when something was seen to drop. This must have been the

Weasel, as the Heron fell alone shortly after perfectly dead, with a bloody gash in its neck.

ANSER CANADENSIS.—Canada Goose. One, in a very disabled state, alighted at Lauderheugh, near the demesne of the Earl of Lauderdale, when it was observed and beset by some of the working men. It barely managed to escape, but was shot the next day by Mr Scott, in St. Leonard's Cauld. The Bean Goose is always plentiful here during the spring, and feeds on the newly-sown fields.

TADORNA VULPANSER.—A party of the Shieldrake was seen here, but as none were shot, it was questionable.

ANAS CLYPEATA.—The Shoveler. This is rare for Lauderdale. A male and a female were shot in Legerwood Moss, by Mr Wilkie, during the winter of 1870, and are both preserved.

MARECA PENELOPE.—The Wigeon is a flying visitor here with us, here to-day and away to-morrow; although I have seen it take a more prolonged stay. It generally associates with other ducks—Mallards and Teals—but from these it is easily distinguished; for when flushed, it is neither the biggest nor the least, and the pure white on the underside is highly characteristic, and it is much more rapid in its flight. Mr Scott shot one—a duck—on the Leader, 8th Nov., 1876, not far from where he shot the one last year. It measured $17\frac{1}{2}$ inches in length, $30\frac{1}{2}$ in breadth, the wing $10\frac{3}{4}$ long; the second primary is the longest. The tail is small, short and tapering, consisting of 14 stiffish acuminate feathers; Macgillivray in his "Manual of British Birds," puts it 16 feathers; Morris more correctly, 14.—This bird when shot, was at some distance from the river, feeding on young grass.

MERGUS MERGANSER.—Goosander. Mr B. Scott shot a female below Newmills. Its mouth was charged with roe. This duck has appeared in several localities, but never plentifully. In January, 1877, we were more fortunate, five having made their appearance, and are still continuing. We may thank the storm for this acquisition.

PODICEPS CORNUTUS.—Mr Wilkie once shot one or two of the Slavonian Grebe during the winter, in Legerwood Loch, whose gloom and seclusion seemed adapted to its habits. There its ordinary society was only a few Mallards and Teals. As soon, however, as the Black-headed Gulls arrived on their annual mission of incubation, converting the entire loch into a regular

Gullery, then it was that these poor timorous solitaires decamped. Of late they have not returned, leaving the place for good and all.

URIA LACHRYMANS.—An immature female bird of the Ringed Guillemot was captured by Mr Simson and his dog, in the Leader. Another, probably the male, was shot a day or two after, near Oxtou. Both, I understand, are preserved.

The Native Birch in Selkirkshire. By JAMES HARDY.

On the occasion of the Club's meeting at Bowhill, I was particularly struck, when at Mr Wood's, of Galashiels, with the aspect of the fine Birches on the margin of Gala Park, a fragment of the famous Ettrick Forest. The soil, composed of the debris of the greywacke formation, is remarkably suitable to the nature of the Birch, and the climate appears to be likewise congenial, for when planted young thriving trees rush up with the most rapid progress, without any check. At Bowhill the native wood of the Forest appears to have consisted principally of Birch, as is indicated by the indigenous growth of young trees on hained grounds. Mr Kerss writes that both the Birch and the Mountain Ash would soon cover the ground, if preserved from pasturage, and the Forest of Ettrick would become woods again, in the course of years. In "Marmion," Sir Walter Scott does not forget, "How clung the Rowan to the rock;" and, "o'er every dell what Birches hung." The following little anecdote, supplied by Mr Kerss, shews the adaptability of the Birch to cover naked surfaces in that upland district. In lower situations attempts to raise strips of Birch have sometimes proved unsuccessful:—"A shepherd, a good many years ago,—either over in Borthwick, or in Ale water, I forget which—was burning heather. For this purpose a Birch rod or switch is generally used, to put the fire out. This he used on this occasion, and after he was done burning the heather, he stuck the Birch rod firmly into the ground. Some years afterwards, when revisiting the spot, great was his surprise to find the Birch rod had grown into a tree. This was told me, some years ago, by a very creditable party, the late Mr Simpson, of Fauldshope."

The Greenland Shark (*Laemargus borealis*, Müll, and Henle),
and its parasite (*Lernæa* (*Lerneopoda*) *elongata*, Grant.)
 By Mr ANDREW BROTHERSTON, Kelso.

A young female of this Shark was captured on March 21st, 1877, by the crew of a fishing boat, when engaged in the white fishing, about two miles off Berwick. It appears to be rare in the British seas, as very few examples have been recorded. The Arctic ocean is the home of this species, where, according to Capt. Scoresby, it is one of the foes of the Whale. "It bites it and annoys it while living, and feeds on it when dead. It scoops hemispherical pieces out of its body, nearly as big as a person's head; and continues scooping and gorging lump after lump, until the whole cavity of its belly is filled. It is so insensible of pain, that though it has been run through the body with a knife and escaped, yet, after a while, I have seen it return to banquet again on the Whale, at the very spot where it received its wounds. The heart is very small; it performs six or eight pulsations in a minute, and continues beating for some hours after being taken out of the body. The body also, though separated into any number of parts, gives evidence of life for a similar length of time. It is, therefore, extremely difficult to kill, and it is actually unsafe to trust the hand in its mouth, though the head be separated from the body. Whale-fishers frequently slip into the water where these Sharks abound, yet there has been no instance, that I have heard of, of their ever having been attacked by the Shark."—(*Scoresby's Arctic Regions*.)

DESCR. This specimen was $6\frac{1}{2}$ feet in length (when full grown it is 12 to 14 feet, sometimes more) and three feet in girth at the thickest part, which is close to the pectoral fins; there it is fourteen inches deep tapering to three inches near the tail. When fresh the colour was a slaty-grey both above and below, with a few small, round, whitish spots, of various sizes, scattered over the sides, most of them near the lateral line. These spots appear to be characteristic of the young of several species of Shark, disappearing when they come to maturity. The colour seems to vary, possibly owing to age, sex, or season when examined. Dr Fleming says "grey;" Capt. Scoresby "cinereous grey." M. Valenciennes when describing the example found stranded at the mouth of the Seine in 1832, gives the colour dark brown on the back, grey on the belly; and Mr Hutchinson in his description of the example taken on the coast of Durham, in April, 1840, says "the colour of the fish when fresh was brown, deeply shaded with blue; the blue soon faded, and it became dark brown; when quite dry it was cinereous brown."

This specimen, although not the same colour when fresh, has become a cinereous brown when dry. The whole body, to the extremities of the fins, is covered with scattered, unequal, curved spines, having a broad star-shaped base. The points of the spines, excepting those on the snout are directed backwards, so that when rubbed from head to tail, the skin feels smooth, but in the opposite direction, rough. The blunt rounded snout projects about 5 inches over the mouth, which is semicircular; when open it is nearly round. The form and arrangement of the teeth in each jaw are very different; upper separate, with a broad base, suddenly becoming slender, conical, somewhat lance-shaped, the points curved laterally from the centre. In the mandible they are arranged in seven * compact rows, overlapping and recumbent on each other, the cusps like the teeth of a saw, with the points diverging from the centre to each side. The three outer rows are well developed, the others get gradually weaker inwards; only one row of teeth is in use at a time, the others lying flat. The upper appear to be adapted for holding, the lower for cutting, all are capable of being folded inwards. The nostrils which are near the extremity of the muzzle are large, oblique, with a division in the middle, covered by a triangular flap. When skinning the head, I observed several canals, filled with a transparent jelly-like substance, which were connected with numerous pores, some of which were arranged in lines, others in clusters. They appear to be the source of the mucous secretion, with which the body of the fish is covered. The eyes, which are large, are six inches from the muzzle; iris blue, pupil emerald green. Spout-holes four inches behind the eyes, and situated a little higher. Branchial openings, five on each side, unequal in length, the first longest—2 in., the last $1\frac{3}{4}$ in., all are situated in front of the pectorals. The relative distances of the anterior part of the fins from the snout, are:—pectorals, 1 ft. 8 in.; first dorsal, 2 ft. 7 in.; second dorsal, 4 ft. 3 in.; caudal, 5 ft. 3 in., the upper lobe of which is 15 in. long; lower, 9 in. The posterior part of the base of the ventrals are directly under the origin of the second dorsal; no anal fin. The dorsal fins are preceded by an elongated keel on the back, the first longest; a similar keel on each side at the smallest part near the tail. The fins in this species are very small, which accounts for its sluggish movements. The pectoral, ventral, and upper part of the caudal fins, are obliquely truncated; both dorsals are much attenuated backwards.

Like all the Sharks the stomach was large and capacious; the throat so wide that whatever could get into the mouth, would be swallowed without difficulty. The following were the contents of the stomach:—A Lump-Sucker (*Cyclopterus lumpus*) in a partially digested state had been disgorged during transit. The bones of several other fish, one of them about two feet in length, were still in it when opened, but all too far gone for identification. The eyes (the pupil) of fish appear to be difficult

* "The rows of teeth vary in number from two to six, probably depending upon the age of the fish."—Yarrell's "Brit. Fishes," Ed. 3d, vol. ii., p. 528.

of digestion; in the stomach was one which seemed as if it had been boiled; it was opaque white in colour, quite hard and cracked longitudinally, even harder than the bones which were beside it.

On the posterior edge of the pupil of the right eye, was an example of the parasite—*Lernæa elongata*, Grant.—which is peculiar to this species of Shark. The part of the animal which is visible (the head and body being buried in the eye) consists of two white vermiform filaments, each $1\frac{1}{2}$ inch in length. After putting the eye and its “appendages” in spirits, they contracted a little. The eyes of the Greenland Shark with its parasite attached, were first brought to this country by Capt. Scoresby. They were submitted to Sir David Brewster, who gave one specimen to Dr Grant. It proved to be a new species, which Dr Grant named *Lernæa elongata*, and described and figured it in Brewster’s “Ed. Jl. Sc.” vii., 147, t. 2, f. 5. (1827). The fish which are attacked by this parasite seem to be rendered blind. “The sailors,” says Capt. Scoresby, “imagine this Shark is blind, because it pays not the least attention to the presence of a man; and it is, indeed so apparently stupid, that it never draws back when a blow is aimed at it with a knife or lance.”—(*Arctic Regions*, p. 539).

I am indebted to Mr Hardy’s kindness for the following description from Baird’s “British Entomostraca,” Ray. Soc. 1850, pp. 332-334.

“Family, LERNEOPODÆ. Char. Arm-shaped appendages long, wide apart from each other at their base, and united only at the tip.

Genus LERNEOPODA, Blainville, Jour. Phys., xcv. 442 (1822) Kroyer, M. Edwards, W. Thompson, Rathke=LERNÆA, Gisler, Linn, &c. Char. Fem. Body generally elongated, oval. Head short and thick; two pairs of foot-jaws, well-developed and placed near each other. External ovaries of moderate length and cylindrical. Male. Body divided into two nearly equal portions of an ovoid shape; one representing the head, the other the thorax. Much smaller than the female. * * * * *

1. LERNEOPODA ELONGATA, Tab. xxxv. fig. 5.

LERNÆA ELONGATA, Grant. Brewster’s Ed. Jl. Sc. vii., 147, t. 2, f. 5 (1827).

LERNEOPODA — Kroyer, Tidsskrift, 1, t. 2, f. 12, t. 3, f. 3a.

————— M. Edwards, Hist. Nat. Crust. iii., 515.

The Eye of the Greenland Shark, Scoresby’ Arctic Regions, i. 538, t. 15, f. 5.

DESCR.—The head is very distinct, of a horny texture, ovate, depressed, broad at the base, and obtusely pointed in front, resembling very much the shape of the body of the common Spider-Crab. The 2nd pair of foot-jaws is large and well-developed, consisting of a large rounded, oval, basal joint, and a more slender, curved, hooked terminal one, with a pretty strong tooth

152 *Arrival, Departure, &c., of Birds*, by James Hardy.

on its inner edge. The head is united to the body by a short narrow neck. The thorax is long and narrow, of a somewhat club-shaped form, and gives origin to two long cylindrical arms, which considerably exceed the length of the body. At the posterior portion, which is somewhat truncate, we see two small lobes; and on each side of these spring the ovaries, which are about the length of the entire body, thick, straight, and cylindrical.

Length of the whole animal, nearly 3 inches; head, $1\frac{3}{4}$ line; body, $7\frac{1}{2}$ lines; arms, 1 inch 1 line; ovaries, 1 inch $1\frac{1}{2}$ line."

The specimens of both the Shark and its Parasite are now in the Berwick Museum.

Arrival, Departure, and Local Movements of Birds, near Oldcambus, 1876. By JAMES HARDY.

JAN. 30. 19 Eider Ducks on the coast.

Feb. 15. About 60 Mallards at the sea; and 8 Herons.

Feb. 16. About 150 Mallards at sea; the hills being white with snow. One Lapwing arrived.

Feb. 22. 6 Lapwings in a band passing across the fields. Golden Plover heard.

Feb. 23. 15 Curlews on the sea-banks.

March 1 and 3. 16 Lapwings in the fields, previous to taking to the hills.

March 28. 3 Wheatears at sea-banks. 3 Cormorants at sea-coast; only one pair of Ducks at sea, and one Redshank.

March 29. 7 Cormorants at their favourite rock.

March 31. The 3 Wheatears more inland; 9 Curlews on the coast. No Redshanks; one or two Herons; 4 Cormorants.

April 1. About 27 Ducks at sea, and 2 or 3 Curlews on the coast.

April 2. The 3 Wheatears have advanced about a mile northwards. They appear to move forward in small parties only. Black-headed Gulls heard.

April 3. Two Pied Wagtails, and a Grey Wagtail at a waterfall on a stream near the coast. Another pair of Wheatears arrived. 5 Redshanks seen. One Lapwing left. Other 4 Wheatears at a breeding place on the coast where a pair settled.

April 4. 6 or 7 Curlews, and a pair of Redshanks.

April 7. 4 Cormorants; no Curlews, Redshanks, nor Wheatears; 1 Heron. Cuckoo heard.

April 8. 7 Curlews on the coast. From 24 to 26 Eider Ducks visible in Siccar bay. 7 Mallards still left behind, and 3 Cormorants.

April 14. 5 Redshanks; 1 Curlew, and 3 Ducks, still here.

April 15. Woodcock seen.

April 20. 3 Curlews and 1 Heron.

April 21. Ring Ouzel arrived in the Dean; continued till 26th. Solan Geese first seen in open sea. A single Cormorant remains, and 2 Ducks. Small scattered numbers of Wheatears here and there visible.

April 25. Chimney Swallows seen at coast.

April 26. *Sylvia trochilus* in hedges. A single Heron remained all the summer. One Curlew.

April 27. No Swallows.

May 1. No Willow Wrens; weather bad up to and after this date.

May 3. Willow Wrens (*S. trochilus*) again seen; 2 Wild Ducks; 1 Heron; 1 Curlew. Chimney Swallows at sea-coast.

May 5. 4 Curlews on the shore. Willow-Wrens more dispersed inland.

May 6. Willow-Wrens numerous at Pease Bridge. Call of *Sylvia sylvicola* heard. Blackcap's song unfrequent, crude, and short. 3 Curlews and 2 Herons at shore; 4 Eider Ducks.

May 8. Several Whitethroats arrived. One Swallow; 3 or 4 Martins at the Swallow Crag on the coast, first arrivals.

May 9. 9 Curlews on the coast; returned birds that had not paired.

May 10. Two Cormorants appear to be the unpaired birds left.

May 12. Both Swallows and Martins seen at Siccar Cove.

May 15. Weather still bleak; Swallows scarce.

May 19. Swallows about the stading.

May 20. Swallows take up their residence; 10 or 11 Curlews at coast.

May 28. Swift first seen.

May 29. A Honey Buzzard shot in Penmanshiel Wood.

June 1. 12 Swifts in a body seen on the coast. Single Cormorant still seen.

July 4. 9 or 10 Redshanks have returned; and a few Curlews

154 *Arrival, Departure, &c., of Birds*, by James Hardy.

- frequent the shores. Lapwings have descended to the turnip fields.
- July 5. About 30 Curlews on the shore; mostly young birds, and very tame.
- July 11. 2 Herons on the shore.
- July 15. The single Cormorant at its rock. Black-headed Gulls have come to coast, hunting among the sea-weed; 16 or 17 Curlews and 5 or 6 Redshanks on the shore. 6 Herons fishing.
- July 17. About 30 Curlews present; and 10 or 12 Redshanks. Young Wheatears visible. Several old Black-headed Gulls and a few young present.
- July 19. A few Curlews still on the inland moors.
- July 20. 4 Cormorants at the coast.
- Aug. 8. About 100 Black-headed Gulls asleep on gravel at the coast; all adults with two exceptions. Young *Sylvia trochilus* and White-throats come to the garden, catch the flies on the walls, pick up caterpillars, and glean the remnants of the currant-berries.
- Aug. 15. 32 Curlews at the coast; 7 or 8 Herons; and about 10 Redshanks, which represent the general numbers at present frequenting it; on Aug. 16, however, the number of the Curlews advanced to 50, there having been a previous drought.
- Sept. 18. 8 Cormorants at the rock; the salmon-fishing off their favourite roosting-place had hitherto deterred them from resorting to it, as usual. Martins had left before this date.
- Sept. 28. 12 Cormorants at the "Scart rock."
- Sept. 29. Swallows left, the young having only been out for a few days, had determined their stay.
- Oct. 2. 15 Mallards have returned to the sea, after great rains inland.
- Oct. 20. Wild Geese seen.
- Oct. 22. Grey-backed Crows arrived, and remained a few days.
- Oct. 23. Snow-flakes arrived.
- Oct. 24. Wild Ducks again seen. Raven frequenting a dead hare.
- Oct. 27. Solan Geese still seen on the coast. A pair of Stone-chats arrived in a turnip-field, and remained till next spring.
- Nov. 8. Fieldfares here.
- Nov. 12. Water-hen still frequenting inland ponds.

Ornithological Notes. By ROBERT GRAY, F.R.S.E., F.S.A., Scot.

PEREGRINE FALCON (*Falco peregrinus*).—Since my last communication, I have had an opportunity of examining another pair of East Lothian Peregrines, killed near North Berwick. The male was shot on 14th April, 1876, and the female bird, which was very large, and more like some of the West Country Peregrines I have seen, was obtained five days later, namely, on the 19th. Another was seen on the 27th of the same month on the Island of Fidra, within a short distance of North Berwick. I had also an opportunity of seeing a young male which had been shot near Edinburgh, on 11th May last. These and previously recorded occurrences shew that the Peregrine is increasing in numbers in the Lothians.

GOSHAWK (*Astur palumbarius*).—Through the obliging attention of Mr Small, of this city, I had an opportunity of examining a newly killed Goshawk, which was obtained near Elie, in Fifeshire, on 26th of January, 1877. The bird was a female, and in splendid plumage. I mention the present capture on account of the rarity of the species in Britain. The Goshawk occasionally visits the Eastern Counties of Scotland from other countries. One was shot at Hazelhead, near Aberdeen, on 22nd January, 1876.

ROUGH-LEGGED BUZZARD (*Buteo lagopus*).—During the present winter I have examined several specimens that were sent to Edinburgh, for preservation; one killed near Roslin, on 23rd October; a second from the Pentlands, on 25th November; a third—a female—which was trapped near Innerleithen, on 30th November; a fourth from Yester, on 28th December; a fifth—a male—shot near Lauder, on 15th February; a sixth—a female—from the same locality, on 1st March; a seventh from near Peebles, on 24th March; and an eighth—a female—on the 4th April, from Peeblesshire. The last mentioned specimen was unusually light in colour. While on this subject I may mention the latest dates in the spring of last year (1876) on which specimens were obtained; one at Crieff, on 30th March; one at Loch Lomond side, on 31st March; one—a male—trapped at Castle Toward, Argyleshire, on 3rd April; and one—also a male—from Peebleshire, a few days later. All these birds, which came under my own observation, were in fine plumage, being evidently migratory visitors from Scandinavian forests.

HONEY BUZZARD (*Pernis apivorus*).—A very handsome male bird of this species was shot near Pencaitland, on 22nd September last, and sent to Mr Small for preservation. It was of large size, and unusually dark in colour. This bird was exhibited by Dr J. A. Smith, at a meeting of the Royal Physical Society.

SHORT-EARED OWL (*Otus brachyotos*).—Short-eared Owls were again very plentiful throughout the district in September and October. Mr Hope, bird stuffer, George Street, shewed me one in the flesh—a young bird with traces of down upon it—which had been shot near Ayton, in Berwickshire, on 13th July, 1876. This would seem to indicate that the species breeds somewhere on the Berwickshire moors.

TAWNY OWL (*Syrnium stridula*).—If one may form an opinion from the numbers of this Owl which are sent to the Edinburgh taxidermists, this is unquestionably the most common species in the Eastern Counties—the Barn Owl and Long-eared Owl being comparatively scarce. The grey plumage seems characteristic of the Tawny Owls of the Lothians and districts lying to the north. Judging from the clear grey plumage and plump condition of the birds, I am inclined to regard many of those found upon the Eastern Coasts as migratory visitors.

GREAT GREY SHRIKE (*Lanius excubitor*).—A male was shot at Bowhill, Selkirkshire, on 9th March, 1876. It had, like most others I have examined, only one spot on the wing. Another, in similar plumage, was killed at Ormiston, Haddingtonshire, on 22nd November last.

BLACK REDSTART (*Phœnicura titiys*).—An immature female Black Redstart was shot on the banks of the Forth, opposite Kincardine, by my friend, Mr John A. Harvie Brown, on 10th November, 1875; and in August, 1876, a male was observed at Elie, in Fifeshire, by Dr Purves, of Edinburgh, who knows the species well, and is therefore sure of having identified the bird correctly. I mention the two instances as an inducement to those members of the Club, resident in East Lothian or Berwickshire, to look out for the Black Redstart in both counties.

JAY (*Garrulus glandarius*).—As it is now generally believed that the Jay is becoming very scarce in East Lothian and Berwickshire, it may not be out of place to mention that two specimens, male and female, were killed near Salton, on 2nd February of the present year.

HOOPOE (*Upupa Epops*).—A specimen of this rare visitant (a female) was shot near Burntisland, in Fifeshire, on 25th April, 1876. At the risk of repetition, I may recal to mind the occurrence of a Hoopoe, at East Linton, in August, 1871, and of another at Kingston, near North Berwick, on 27th September, 1873—both of which are recorded in the Proceedings of the Royal Physical Society of Edinburgh.

NUTHATCH (*Sitta Europæa*).—A female Nuthatch, which appears to be a rare species in Scotland, was shot near Jedburgh, on 18th January of the present year. It was sent to Mr Hope, in whose hands I saw it.

GREEN SANDPIPER (*Totanus ochropus*).—One was shot at Crailing Hall, Oxnam water, on 6th November, 1876. It is now in the possession of Mr Hope, who shewed it to me for identification.

CORN-CRAKE (*Crex pratensis*).—Unusual numbers of Corn-crakes were sent from various quarters of East Lothian to Edinburgh for preservation, in October, 1876. One specimen—a very handsome bird—was unusually large and well marked. Several were shot as late as the 18th of the month. This bird seems very scarce in the neighbourhood of Edinburgh; at least it has been so for the last three years. I do not remember having passed so long an interval in my country walks without either seeing or hearing the familiar Corn-crake. I have observed the same scarcity for some years in Ayrshire.

CANADA GOOSE (*Anser Canadensis*).—On 8th April, 1876, three specimens of this Goose were shot on Linlithgow loch. Other two were killed about the same time in East Lothian. None of these birds shewed any trace of having been in confinement, though they were, in all likelihood, escapes from private ponds.

SHOVELER (*Anas clypeata*).—A young male was shot on the Forth, on 13th November, 1876. This duck appears to occur in limited numbers every year in the estuary from Inchkeith to Kincardine.

LONG-TAILED DUCK (*Harelda glacialis*).—In November last, I examined a number of immature birds—males and females—which had been shot about the close of the month near North Berwick, and along the coast. The males had no long tail feathers, but were otherwise characteristically marked.

SMEW (*Mergus albellus*).—A male Smew, in most beautiful and perfect plumage was shot at Bowhill, Selkirkshire, on 25th

January, 1877, and sent in the flesh to Mr Hope, George Street, for preservation.

GOOSANDER (*Mergus Merganser*).—Though perhaps less plentiful than in 1875-76, the Goosander seems to have occurred in considerable numbers throughout East Lothian and Berwickshire during the past winter. Last year I examined four specimens that were shot in the end of March and beginning of April. One—a male in summer plumage—occurred as late as the 15th May.

MERGANSEER (*Mergus serrator*).—A most beautiful male in full breeding plumage was found dead on the beach near Cramond, on 23rd April. The markings and shining lustre gave the bird a strikingly handsome appearance. I record the occurrence, as it has rarely happened, in my experience, that a Merganser has been met with so late in the season in the Lothians.

SCLAVONIAN GREBE (*Podiceps cornutus*).—This Grebe is, I find, rather a scarce species in Berwickshire and the Lothians. One was shot at Prestonpans on 12th January of the present year, and sent to Mr Small, who informs me that he has not seen a specimen for many years. It is a somewhat singular fact that of the British Grebes, the Eared Grebe—regarded as a comparatively scarce bird in Britain—is the commonest species on the shores of East Lothian and Berwickshire. It is easily distinguished from other Grebes by the upturned form of the lower mandible, but seems to have been overlooked in many quarters probably from its general resemblance to *P. cornutus*.

BLACK-THROATED DIVER (*Colymbus arcticus*).—A specimen in winter plumage, with faint traces of the gular patch, was shot on St. Mary's Loch, Selkirkshire, in the first week of April, 1876, and another was obtained on the same loch on 4th April of the present year. This very beautiful Diver is seen every year in the Frith of Forth off Dunbar and North Berwick, in full summer plumage about the middle of April.

COMMON GUILLEMOT (*Uria troile*).—Several specimens in full summer plumage were shown to me on the third of last month (March 18, 1877); they were shot near North Berwick. This is unusually early, as the plumage must have been fully assumed at least a week previously. I may here record that a specimen of this bird in my collection, which was shot in December at the entrance to Gareloch, Argyleshire, has the whole of the under plumage covered with undulating faint grey lines, like those

which distinguish the immature plumage of the Great Grey Shrike.

LITTLE AUK (*Mergulus melanoleucos*).—In December and January a flock of Little Auks seems to have reached our coasts. Specimens were sent to Edinburgh from North Berwick, Tynninghame, Dunbar, and other places in Haddingtonshire, and several were sent from Fifeshire and Midlothian. One was found in a turnip field at Lasswade, and others were met with at Granton and Trinity.

GLAUCOUS GULL (*Larus glaucus*) has been again very abundant along the coast from Dunbar to North Berwick. I have, during the last three months, examined numerous specimens from that district, and also from Musselburgh, and the shore near Newhaven, Trinity, and Granton. This species seems to vary very much in size. It may now be regarded as a common winter visitant to the Firth of Forth.

BUFFON'S SKUA (*Lestris Buffoni*).—A young bird in the plumage of the first year was shot on the Rule water, Roxburghshire, in the first week of September, 1875. Viewed from a little distance this specimen shews, faintly outlined, all the characters of the adult bird, with the exception of the long tail feathers. On closer examination, however, all the dorsal feathers are seen to be tipped with brownish yellow, while the under surface is similarly besprinkled, but in so faint a degree that the slightest disturbance of the feathers shews the white plumage underneath. The neck also shews distinct traces of the yellowish white, which encircles it, and which is a distinguishing feature of the adult. The bird when placed alongside a young Richardson's Skua of the same age is seen to be smaller and of much more elegant shape. It also differs materially from the ordinary colouration of that species; the one being of a dark brown with yellowish markings; the other almost wholly of a cinnamon colour, except the quill feathers which are dark and tipped with light brown. The under plumage of Richardson's Skua is broadly margined, so that on pushing aside the feathers none of the white is seen.

STORM PETREL (*Thalassidroma pelagica*).—A specimen of this Petrel was shot on the Rule water, Roxburghshire, on 23rd September, 1876.

ROBERT GRAY.

13, Inverleith Row, Edinburgh,
25th April, 1877.

On the Ancient Stone and Flint Implements of Berwickshire and the Borders. No. III. By JAMES HARDY.

Through the interposition of several friends and members of the Club, I am enabled to offer another view of the expedients for use or warfare, to which the primitive people of the district had recourse, when metals were either unknown or sparsely diffused amidst a prevailing barbarism. Mr Middlemas has again performed the good office of furnishing exact and lively representations of these curious objects; and I am happy to say, there still remain others, which may be available for further illustrations. Along with a general unity of type, there is a very considerable variety of detail in these articles, scarcely two being the exact counterpart of each other. This originated from the want of correspondence in shape of the original intractable material that formed the basis, it being sufficient for the object intended, that each should be worked to an ideal model. Judging from these examples, the stone-equipment of a native community, either for warlike or domestic purposes, must have been of a very heterogenous character, the result of necessity, rather than of diversity of taste.

The figures in Plates I. and II., are about half the natural size, those on Plates III. and IV., are of full proportion.

I. AXE-HAMMER AND ADZES OR HOES.

1. The large perforated axe-hammer, Plate I., fig. 1., is formed of the coarse-grained greywacke of the district. It is $7\frac{3}{4}$ inches long; $4\frac{1}{4}$ inches broad; $2\frac{1}{2}$ inches thick. The thickness is not uniform, but is less behind the perforation for the shaft, than in front of it. The weight is $6\frac{1}{2}$ pounds. The diameter of the haft-hole is 2 inches on one side, and $1\frac{1}{2}$ on the other; it is neatly and uniformly drilled, apparently from one side only. It would admit of a stout handle. It was probably bored by a metal implement. The perforation is $2\frac{1}{2}$ inches from the blunt end, and $3\frac{1}{2}$ from the other. The flat faces have been rubbed down with considerable labour, and then hollowed out. The shallow depression is of the shape of the outline of the axe, and is deepest round the haft-hole. The side where moisture has not acted on it, is the smoother, and has even a polish on it. The edges are rounded, sharpest towards the narrow end. The blunt end is slightly flattened. The narrow end is not sharp, but blunted, so

that it could not cut, and has a curved outline. The picking to form the slope to the narrow edge is still visible. The blunt end has some dints in it, as if it had been put to service. This ponderous weapon may have been used in slaughtering cattle, or as a mallet for driving piles or stobs. From a trace of bog-iron ore adhering to it, it appears to have been lying in moist soil. It is from the Paxton estate, and was furnished by David Milne Home, Esq. Axe-hammers of this shape are figured in Worsaae's "*Primeval Antiquities of Denmark*," p. 16; Jewitt's "*Grave Mounds*," p. 112, fig. 136; and Evans's "*Ancient Stone Implements of Great Britain*," pp. 172, 173, 175. This last, fig. 127, of micaceous grit, comes the nearest in outline, and was found in a barrow at Rudstone, near Bridlington, by the Rev. William Greenwell, F.S.A. In it, however, the faces were flattened, and not hollowed as in this; but the thick end was somewhat flattened. "It lay behind the shoulders of the skeleton of an old man lying on his left side, with his right hand on his head, and his left to his face. Before the face was a bronze knife 4 inches long, with a single rivet to fasten it to its handle, and close to the axe-hammer lay a pointed flint-flake re-chipped on both faces."

2. Plate I., fig. 2. A flattish, perforated, stone-adze or hoe; wedge or celt-shaped, with rounded conical end. It is of a finer greywacke than the preceding, and has been smoothed all over so far as the material admitted of being so dressed. One of the broad surfaces is more convex than the other; they slope off rounded to the sides, where there is no smooth lateral space, all being rounded. The length is $6\frac{3}{4}$ inches; breadth 3 to $3\frac{1}{2}$ inches; thickness $1\frac{1}{2}$ inch; weight $35\frac{1}{2}$ oz.; aperture of the haft-hole, 1 inch; it is drilled in a neat workmanlike manner, from the two sides, being narrowest in the middle. The aperture is $2\frac{1}{2}$ inches from the conical end, and 3 from the other. The cutting end is quite blunt, and damaged. The surface has been scratched with the harrows, or ploughs. It is incapable of scooping out wood as an adze, unless the wood had been burned. Possibly it may have been a hoe, for digging or cultivating the soil. There is a similar implement formed of greenstone, figured by Mr Evans, p. 169., fig. 122, as found at Fireburn Mill, Coldstream, and now in the collection of the Rev. W. Greenwell, F.S.A. It has the aperture more in the centre, but, like this, "the shaft-hole tapered

inwards from both faces, one of which is less convex than the other." This was found in May, 1876, when the people were putting in the turnips, on the farm of Broomdykes, Berwickshire. "The field in which it was found adjoins the high banks which margin the haughs." It was furnished by Dr Charles Stuart, of Chirnside.

3. Plate I., fig. 4. Elongated, imperforate, stone adze or hoe. This is a peculiar implement, of a hitherto unpublished type. It is of greywacke, and is rather rudely smoothed or dressed all over. It tapers from the narrow butt-end, gradually outwards to the edge. The one surface is more convex than the other; an attempt having been made to flatten the under face. The broad end on the convex surface is more sloped than the other. The sides are rounded; but on one, there is an attempt to form a lateral face, by smoothing. At more than one-third of its length from the butt-end, a hollow groove $\frac{3}{4}$ of an inch broad has been picked all round, shallowest beneath, across which sinews or twisted withs may have been wrapped to attach it to a handle. The length is $6\frac{1}{2}$ inches; greatest breadth 3 inches; middle $2\frac{1}{2}$; at the butt, 1 inch; thickness $1\frac{1}{4}$ inch; weight $18\frac{1}{4}$ oz. The broad or cutting end is blunted and injured. It may have been a hoe or adze. Like the preceding it has an upper and under side. It was found at Lumsdean, in the parish of Coldingham, in 1876, by a drainer, while pursuing his avocation near an old "camp;" and is in my possession.* This long tapering shape of implement occurs also in a fine smooth slate celt found at the same place, and now in Mr Wilson's Museum, at Coldingham. The slate of which it is composed, is said to be found on the farm.

* Dr C. C. Abbott, of Trenton, in an elaborate article "On the Stone Age in New Jersey," in the "Smithsonian Report" for 1875, p. 351, describes and figures, fig. 194, a stone hoe grooved for the secure attachment of a handle. He concludes that the hoe had "been attached to a handle at right angles to the blade, the handle being placed in contact with the hoe at the under surface, and well lashed by raw-hide strips passing around it and over the side notches; or the handle has been a split, or a forked stick, the ends being drawn about the hoe at the notches, and firmly bound by raw-hide strips at the central notch." Of the use of such "hoes," Professor Nilsson says, "it must be acknowledged that if agriculture, as seems most probable, consisted originally in burning tracts of forest, and then sowing among the ashes, these rude hoes must have been very suitable for such operations."

(*On the Stone Age in Scandinavia.*)

II. HAMMER-STONES.

1. Plate I., fig. 3. This imperforate small hammer-stone is formed of an irregularly oval, flattish sided, greywacke gravel-stone. The edges are naturally rounded, and except some attempts at levelling portions, the rest remains as it was, when it first caught the eye of its savage owner. A shallow depression on each face, exactly opposite, has been picked, for the purpose of its being held between the finger and thumb, when put to use, which may have been to fashion flint-arrow heads, crack bones for culinary purposes, or any light work. It was found in 1875, by Mr W. H. Johnson, Ramrig, in a field called the "West division of Horndean Wester Hill," near the village of Horndean, in Ladykirk parish. In a note, Mr Johnson says, "I may mention that in looking through the collection of stone hammers and axes in the British Museum, I found two, almost exactly the same as mine in size and shape; one was from Wicklow, Ireland, the other from Denmark." This does not appear to have been much worn by use. Its length is $3\frac{1}{4}$ inches; breadth $2\frac{1}{2}$ inches; thickness $\frac{3}{4}$ inch; weight $7\frac{1}{2}$ oz. A very similarly shaped stone, but perforated, occurs in Mr A. Wilson's collection. It is of indurated sandstone, and is thicker. It is perforated rudely from the two sides. It had been preserved as an amulet.

2. Plate I., fig. 5. This circular stone is of an indurated whitish quartzose sandstone, with a reddish hue interfused. The two opposite hollows are picked out; they are not quite central. There is no more of art about it; but there are bruises on the edges, shewing that it has been taken advantage of by the primitive inhabitant. The diameter is $2\frac{1}{2}$ inches; the thickness, $1\frac{1}{4}$ inch; weight $7\frac{1}{4}$ oz. It was found in 1875 by our friend, Mr James Tait, at Berryhill, near Kelso. Externally it does not differ, except for the traces of human art, from the rolled gravel stones, which are numerous in that vicinity.

III. CELTS.

The stone celts to be described belong to Mr Evans's second division, p. 99, "those having their sides flattened. The flat sides taper away to a point at the cutting edge of the celts, and usually diminish much in width towards the butt end, which is commonly ground to a semicircular blunted edge."

1. Plate II., fig. 1. A heavy, stout, lengthened celt, of a hard darkish grey greywacke slate, with a whitish grey surface-tarnish

occasioned by the wet soil. There are several rusty dashes of iron-markings on the surface. It is almost quite fresh, with the striæ of its last dressing not yet effaced. The concave fracture on it was occasioned by the curiosity of its finder.

It is smoothly dressed all over, sloped towards the sides, along which a smooth narrow space runs. The wedge-shaped broad end is equally, but rather abruptly, owing to the thickness of the implement, sloped from both sides; the cutting edge is somewhat oblique; it is finely smoothed and sharpened. The surface appears to have had several rubbings lengthways, before it received the general polish. It appears to have been brought nearly to an edge at the butt. The length is seven inches; the breadth $1\frac{1}{2}$ inch at the butt; and so on increasing from 2 to 3 inches; thickness $1\frac{1}{2}$ inch; weight 21 oz. Figures shewing, how such a celt was hafted, in an opening cut through the end of the handle are given in Worsaae's "*Primeval Antiq. of Denmark*," p. 12, note; and Evans's "*Stone Implements*," pp. 138, 139, fig. 91, 92. This fine celt was found at Burnfoot, near Threeburnford, in Lauderdale, in the spring of 1876, and was brought in September to the Club meeting at Kimmerghame, by Mr Robert Renton; who also brought a broken celt of the same material, which he himself had found; and he had the fragments of another. It may also be noted that Mr Renton likewise exhibited a bronze celt, a little larger, but almost similar to the one figured by Mr Bolam in the Club's Proceedings, vol. vii., plate V., which had been found in 1861, between Clint's Mill and Rashley Hall, near the old road to Melrose. A small slate-celt from Lauder Common remains yet to be figured.

2. Plate II., fig. 3. A short, neat, conico-wedge shaped celt, polished all over, rounded sloped to the sides, with a slight trace of a lateral area; nearly equally sloped on both surfaces to the cutting face, and ground down to a sharp edge. It is of a finely freckled syenitic greenstone, and is considerably weather-eaten by exposure. It may have been broken at one time, and repaired. The length is $4\frac{1}{2}$ inches; breadth $1\frac{3}{4}$ - $2\frac{3}{4}$ inches; thickness, $\frac{3}{4}$ inches; weight $8\frac{1}{4}$ oz. This was found by Mr Alexander Leitch, tenant of Fairneyside, in Blaikie's field, where once existed a camp. Mr Leitch once had a greenstone cist of the kind, with a long streak of white, all down the edge on one side, found at Long-Yester.

3. Plate II., fig. 4. A very perfect, smaller-sized celt, of precisely the same variety of greywacke slate as No. 1 ; but lighter and thinner. The butt-end has a blunt conical edge ; both surfaces are convex, but one is smoother than the other. The scratches of the original polishing still remain, it being dressed all over. It has a smooth narrow lateral space. In forming the broad end, the one side has been more bevelled than the other. The cutting edge is beautifully polished, and has been designedly blunted all round ; and has a greenish tint. It is of the same material, has the same white tarnish, the same rusty streaks, and tawny freckles, and the same surface of the unpolished hollows, as No. 1. We may therefore conclude, that it was manufactured in Lauderdale, from the same quarry as that celt. It is in length, $5\frac{1}{4}$ inches ; breadth $1\text{--}2\frac{1}{2}$ inches ; thickness 1 inch ; weight 9 oz. Found on the Palinsburn estate, and communicated by Watson Askew, Esq.

4. Plate II., fig. 5. Rather smaller than the last, and more tapered at the smaller end, of a finer pale grey slate, which admits of a higher polish, considerably freckled with iron-nodules (decayed pyrites), less convex, somewhat flattened on the ridge ; a much thicker polished side area ; with a remarkably fine sharp edge at the widest end, which is flatter on one side than the other ; the butt-end is cut directly across and blunted. Before it has been polished one side has been rubbed down lengthways. This is a fresh polished article, with the shine of the polishing process unimpaired. It appears never to have been used. Length $4\frac{3}{4}$ inches ; breadth from $1\text{--}2\frac{1}{4}$ inches ; thickness, $\frac{1}{2}$ inch ; weight $7\frac{1}{2}$ oz. This was found in Feb., 1876, by Mr Balsillie, Jun., of Dykegatehead, parish of Whitsome, on the surface in a turnip field, where sheep were netted on, on the south side of the Pistol Plantings. The soil is gravelly. It may have been turned up from a grave.

5. Plate IV., fig. 1., full size. A neat small celt finely polished all over, leaving no traces of the manner in which it has been planed, of a pale grey slate, similar to the last, but not identical, marked with many brown river-like broken lines in its composition ; rounded sloped to the sides ; where the side area is not so broad as the last, and more accurately formed ; the whole article having had much pains taken with it. It is sloped down to the butt-end, which is finely sharpened ; and is triangularly equally

sloped on both sides at the wider end, which is brought to a fine cutting edge. Length $4\frac{1}{2}$ inches; breadth 1-2 inches; thickness $\frac{1}{2}$ inch; weight $5\frac{1}{4}$ oz. This beautiful celt belongs to Miss Weatherly, Cockburnspath, and was picked up in her grandfather's time, long ago, on Redheugh-hill, on the farm of Redheugh. There are still the remains, although ploughed over, of a large British camp on Redheugh-hill. Some rude graves have been ploughed up on the field adjoining it, and two hand-mills have been brought to the surface. On the moors beyond, there still remain a few tumuli; some camp-like cattle or sheep-folds; and at one place, near the junction of Howpark road with the post-road, four or five well-marked British hut-circles.

IV. WHET-STONE.

1. Plate II., fig. 2. This is of greywacke, and is formed on the same model as the slate-celts, with lengthways smoothened spaces; and a flat outer edge which in this instance proceeds all round. The original rough texture has been smoothened all over. It has been considerably used in rubbing on one side, as represented in the figure. The perforation is rude, much wider at the openings than inwards, and has been made from two sides, the openings not exactly opposite. The aperture is an inch from the rounded-conical end. This stone is only a fragment of 4 inches in length. The breadth is 2 inches; and the thickness 1 inch. This was found by Mr Leitch, of Fairneside, in the same field where he obtained the syenite celt, No. 2. At Long-Yester he had obtained two similar stones. I noticed a smaller and more symmetrical fragment of a similar rude implement, also of greywacke, in Mr Wilson's collection at Coldingham. The perforation enabled the owner to carry it about suspended by a thong.

V. ARROW AND SPEAR-HEADS OF FLINT.

1. Plate III., fig. 1. This very artistically chipped arrow-head, with two barbs and stem, was found on the farm of Greenwood, on the Renton estate, in 1874. The edges are finely serrated. It is of a pale grey flint, speckled with white. It belongs to Dr Robert Hood, who exhibited it at the Coldingham Meeting of the Club, July 30, 1874.

2. Plate III., fig. 2. A fragment of a smaller arrow head of flint, identical with the last, of a pale grey with white blotches. The form has been similar, but the stem only remains, and the

barbs are broken away. Found in a field at Penmanshiel, in winter of 1874-5.

3. Plate III., fig. 5. A leaf-shaped arrow head of whitish grey flint, very artistically formed, with undulating cross-strokes. It may be of the same variety of flint as Nos. 1 and 2. Found in 1875, near an old camp (British) on Bowshiel farm, as well as several other wrought flints. In this field, stone bullets formed of greywacke, similar to those found on the opposite and adjoining farm of Penmanshiel, have occasionally been picked up; also a stone-quern.

4. Plate III., fig. 4. A very fine laboriously-chipped leaf-shaped spear or javelin head, of a light grey flint, darker, however, than the preceding articles. The point is blunt, and would not do much execution. Its length is $4\frac{1}{2}$; and its breadth 2 inches; weight 2 oz. It was found, many years ago, by a shepherd on the top of Blackcastle hill, East Lothian, in the parish of Oldhamstocks. It belongs to Miss Weatherley, Cockburnspath. There is an ancient camp on Blackcastle hill.

VI. PIERCERS.

1 and 2. Plate III., figs. 5*a* and 5*b*. These two narrow artistically chipped pieces of flint, are perhaps fragments of piercers or borers. Found at Penmanshiel, in 1875.

VII. SCRAPERS.

1. Plate III., fig. 3. A duck's-bill shaped scraper of darker grey flint, chipped all round, and from both sides. Penmanshiel, 1875.

2. Plate III., fig. 6. A similar shaped scraper, with its edges artistically wrought, especially on the conical front. It is of a pale grey flint corresponding to arrow heads, Nos. 1 and 2. Found at Penmanshiel, in 1873. Whatever use these had been put to, it could not have been as light-strikers, as when applied to this purpose now, it invariably damages the neat workmanship of the aborigines.

3, 4, 5, and 6. Plate IV., figs. 2 and 3, and 2*a* and 3*a*. Small disc shaped scrapers of darker grey flint, very artistically wrought. They were found at Penmanshiel in 1873 and 1875. They may have been used in polishing bone-pins, etc.

7. Plate IV., fig. 4. A very fine horse-shoe shaped scraper of a blackish grey flint, much darker than any of the other articles. It is chipped all round. It reminds one of the luxurious flint

scrapers which the Rev. W. Greenwell finds during his excavations in the native country of flints, and of which he was so kind as to present me with characteristic examples. It was found at Penmanshiel, in the winter of 1874-5, in the field below the house; and probably indicated the site of a tumulus.

Notice of Dunse Castle Araucaria. By ARCHIBALD CAMPBELL SWINTON, Esq.

The following is the history of the remarkable *Araucaria* in the garden at Dunse Castle, a lithograph of which is given on Plate V., of the present volume. The seed from which this tree was raised was sent from Brazil, to the late Colonel Hay, by the brothers of his then farm steward. The Colonel not trusting to local skill for raising the plants sent the seeds to his friend, Dr Graham, then Professor of Botany in the University of Edinburgh. The seeds were sown and trees raised from them by the late Mr Macnab, then at the head of the staff of the Botanic Garden. Two of these trees were planted out, one at each end of the terrace in front of the conservatories in the garden, and were for many years objects of general admiration. They had reached in 1861, the height of 27 and 28 feet respectively, but by the frost of unprecedented severity, which occurred in December of that year, they were utterly destroyed. Colonel Hay used to tell how the brother and sister (for the plant is ("dicecious")) of the Botanic Garden trees were sent to him by Mr Macnab, as the produce of the one sowing. The one which forms the subject of the lithograph is a female plant, about 44 feet in height, and has more than once borne cones. Its companion has been supposed from its form to be a male. But this is not certain. A third, much smaller and evidently younger tree, completes the group; which probably owe their escape from the fate which befell their Edinburgh relatives, to the sheltered situation in which they are planted.

In a letter on the subject of these trees, Sir Robert Christison remarks:—"An important fact for cultivators is that they have their internodes shorter and their leaves longer than most other varieties I have seen; and consequently their branches present much finer diversity of light and shade. Other large trees I have seen are on this account by no means so attractive, because one sees light through and through them everywhere."

Report of the Experimental Committee of the Tweed Commissioners, presented to the General Meeting on 4th September, 1876.

The Committee, which was reappointed in September, 1875, met at the Union Bridge, on 10th November, when 185 Black Tails were marked with numbered silver wires and returned without injury to the river. It will be seen by the schedule appended hereto that one of these fish, marked on that day at Heughshield, weighing 13 oz., and measuring 13 inches in length, was recaptured on 4th July, 1876, 237 days afterwards, at Longrack, Stirling, weighing 28 oz., measuring 17 inches, and in the character of a Bull Trout. This is the second instance in which a fish marked as a Black Tail in the Tweed has been captured in the Forth; in the former instance, a Black Tail marked at Start, on October 12, 1871, was caught as a Bull Trout on August 13, 1872 (ten months and one day afterwards), at Fallin, near Stirling. A Black Tail, likewise marked at Start, on September 19, 1872, was recaptured on 18th July, 1873, after 302 days' interval, in the river Dee (Aberdeen) as a Bull Trout. This fish had increased from 18 oz. in weight, and 15 inches in length, to 36 oz. and 18 inches respectively. A Black Tail, marked on 29th September, 1870, at Scotch New Water, weighing 16 oz., and measuring 13 inches, was also recaptured as a Bull Trout, weighing 2 lbs. 1 oz., and measuring 18 inches, at North Esk, Montrose, on 25th September, 1871, 11 months and 27 days after being marked as a Black Tail.

Numerous instances have been reported by the Committee of Black Tails as having been marked and recaptured in the Tweed as Whitling or Bull Trouts, at intervals varying from 12 to 1350 days; and the experiment at Carham pond, alluded to hereafter, points distinctly to the conclusion that most of the Orange Fins placed there on 7th May, 1874, have passed through the intermediate stage of Black Tail to that of Whitling or Bull Trout.

In March last a small pond was excavated at Carham, and the water from Carham Burn, flowing into it through a pipe, was made to pass over rock salt, chloride of magnesium, sulphate of magnesium, chloride of potassium, and bromide of magnesium, so as to represent, as nearly as might be, sea water.

A dozen of the fish were on 9th March placed in this pond;

but in the following July, the sun's rays having raised the temperature of the water, several of the fish died; and on the 4th of July, when the larger and deeper pond adjoining was cleaned out, the 7 surviving fish were taken from the salt-water pond, and, after being carefully marked, were replaced in the large pond.

The following table has been extracted from the Register kept by Mr List, from entries made on each occasion when these fish have been examined by the Committee:—

7th May, 1874.	—Average length, 8	ins.	
8th July, 1874.	—Average length, 8 $\frac{1}{16}$ ins.	; increase in 8 weeks,	$\frac{1}{16}$ in.
5th Nov., 1874.	—Average length, 8 $\frac{3}{8}$ ins.	; increase in 17 weeks,	$\frac{1}{2}$ in.
14th April, 1875.	—Average length, 9 $\frac{7}{8}$ ins.	; increase in 23 weeks,	$\frac{9}{16}$ in.
22nd July, 1875.	—Average length, 10 $\frac{5}{8}$ ins.	; increase in 14 weeks,	1 $\frac{1}{16}$ in.
9th March, 1876.	—Average length, 12 $\frac{1}{16}$ ins.	; increase in 33 weeks,	1 $\frac{9}{16}$ in.
25th May, 1876.	—Average length, 12 $\frac{7}{8}$ ins.	; increase in 11 weeks,	$\frac{6}{16}$ in.
4th July, 1876.	—Average length, 12 $\frac{1}{2}$ ins.	; increase in 6 weeks,	$\frac{8}{16}$ in.
Average increase in length during 2 years and 58 days, about 5 inches.			

By direction of the Committee, the bailiffs marked in the spring of 1876 Grilse kelts to the number of 12, which had been caught at Yardford Fishery, and returned them to the river; one of these, marked on April 28, was found dead on 8th May, at Bailiff's Bat.

Although the members of the Experimental Committee, as well as the practical fishermen who from time to time personally attended the examination of the fish in the Carham ponds, were unanimous in the conviction that they had successively exchanged their character of Orange Fin for that of Black Tail and Whiting, still two *amici curiæ*—viz., Major Dickens, of Cornhill, and Mr Stoddart, of Kelso—who had been invited to give their opinions, maintained that the fish were, and are now, common Yellow or White Trout, and not members of the Salmon tribe. It seemed, therefore, desirable to obtain the impartial opinion of some scientific authority, whose competency to decide the question at issue might be generally accepted. Hence it was that Mr Stirling, of the Museum of Anatomy in the University of Edinburgh, kindly attended a meeting of the Committee on the 25th May last, and attentively examined the fish as they were taken from the pond, measured, weighed, and counted, and returned to the water. He also took away with him, for subsequent dissection, one of the fish in an intermediate stage, which

had been for some weeks in the artificially saline pond contiguous to that in which it had previously been confined. Mr Stirling's very interesting report is annexed, together with the minute measurements and description of the fish, and a lithograph copy of the drawing thereof contributed by him. (Plate VI). The conclusion at which Mr Stirling arrives—viz., that the fish is "migratory"—corroborates the view entertained by the Committee, and will, it is to be hoped, remove all doubt which may have existed of the fact that the Orange Fin is of the Salmon kind, and the previous stage of the Whitling or Bull Trout.

It may safely be said to be established that the Orange Fin is the Smolt of the Whitling and Bull Trout, and the Black Tail is the intermediate stage; but it is not proved whether the Whitling and Bull Trout are identical or distinct branches of the Salmon tribe.

So likewise the Smolt proper is undoubtedly the younger stage of Grilse and Salmon; but no satisfactory evidence has been obtained proving that the Grilse is a younger stage of Salmon, or the reverse.

R. H. HUNTLEY, *Chairman.*

RETURN OF FISH CAUGHT IN THE RIVER TWEED,

WHICH WERE MARKED AND RETURNED ALIVE TO THE RIVER TWEED, AND WERE AFTERWARDS RE-CAPTURED,

During the Year from 16th August, 1875, to 16th August, 1876 :—

No.	Species of Fish.	Date of Marking	Where Marked.	Weight.	Length in Inches.	Species of Fish when Re-captured	Date of Re-capture.	Where Re-taken.	Weight.	Length in Inches.	Difference in Weight.	Difference in Length.	Interval between Marking and Re-capture.
17	Black-Tail.	1875. Nov. 10.	Hengshield	10½ oz.	12	Black-Tail.	1876. Mar. 31.	Broad.	8½ oz.	13	2oz. decrease	1 in. increase	142 Days
12	Grilse Kelt.	1876. April 28.	Yardford.	4¼ lb.	24	Grilse Kelt.	May 8.	Bailiff's Bat	—	—	Size not taken; found in the river dead		
—	Black-Tail.	—	Not known.	—	—	Bull Trout.	May 9.	Do.	3lb. 14oz.	22½	Wire broken and number obliterated		
1183	Do.	1875. Nov. 10.	Hengshield	13 oz.	13	Do.	July 4.	Longrack, Shilling.	28 oz.	17	15oz. increase	4 in. increase	237 Days
93	Black-Tail.	Do.	Do.	12 oz.	13	Whiting.	Aug. 17.	Yardford.	16 oz.	16¼	4oz. "	3¼ in "	280 Days

Note on a Sea Trout (Salmo Eriox or Trutta) from Carham Ponds. By Mr A. B. STIRLING, of the Anatomical Museum, University of Edinburgh.

UPWARDS of 100 smolts were taken from the river Tweed while migrating to the sea on 7th May, 1874, by the Experimental Committee of the Tweed Commissioners, and were placed immediately after capture in an artificial pond prepared for them on the estate of Carham. By desire of R. H. Huntley, Esq., Chairman of the Tweed Commissioners, I was present at the sixth examination of the fish, after a residence of two years and nineteen days in the pond. This examination took place on 25th May, 1876, in presence of R. H. Huntley, Esq., of Carham; George C. Dickins, Esq., Cornhill, Coldstream; Messrs List (Dunse), Young (Berwick), Stoddart and Tait (Kelso), and several other gentlemen of the Experimental Committee, and their assistants. The fish were captured by netting, and transferred for examination to oblong square tubs, raised on a platform, each haul being removed to other tubs, aerated by pouring fresh water into them, until all were thus examined, measured, weighed, and finally counted, and returned to the pond. When emptied from the net into the tubs, in which there was water enough to cover them well, all the fish—over 70 in number—were healthy, plump, and very lively, many of them being upwards of 1 lb., and some bordering on 2 lb., weight. When seen in the water, the whole upper part of the head and back was of an uniform dark olive grey, without spots of any kind, except the dorsal fin, which was sparsely dotted with ovate spots between the rays. The sides of the head and body were lighter grey, and were studded with irregular X shaped black marks, both above and below the lateral line. Those marks were more numerous between the origin of the pectoral and vent fins than from thence to the tail, and the upper and lower long rays of the tail were nearly black. When examined out of the water, the whole under part of the body, from the chin to the tail, had a pure silvery white appearance. The sides of the head and body, as far as a point near the tail, both above and below the lateral line, were light grey, with a slight brassy glare; the pectoral fins short, light brown at their insertion, and shading to black at the posterior margins. The anal fin had a white margin on the

under border, more or less well marked in individuals, and present in all the specimens, but without the black line on the inner side of the white border, so conspicuous in the *Fario* (Northern *Fario Giamardi*). One of the detained smolts, which had been put into a small pond (along with other 10) in which the water was kept salt, to represent as nearly as possible sea water, was presented to me by Mr Huntley for anatomical and zoological examination, and is now placed in the Museum of Anatomy, in the University of Edinburgh.

This specimen, which is a female, weighing $12\frac{1}{2}$ oz., was instantaneously killed by puncture of the Medulla oblongata, and immediately wrapped up in gutta percha tissue, for preservation of the scales and mucous covering. When this wrapping, which excluded light and air, was removed at the end of nine hours, it was seen that the yellow glare had entirely disappeared from the sides of the head and body, and the upper part of the head and back had also become much lighter, the X markings were darker and more distinct, and the under part of the body, from chin to tail, retained its pure silvery white. The opercula have a number of round spots, composed of very minute black dots aggregated together. The ovaries are very well marked, and are in the Black-Tail stage of development; the left ovary is $3\frac{1}{2}$ inches in length, being slightly longer than the right. The oviducts are also well developed, and are four inches in length from the posterior apex of the ovaries to the vent.

The ova exceed in size those of the herring at the spawning season. The stomach was empty, and small in proportion to the size of the body. The pyloric capsule was dotted with black pigment, and almost destitute of fat. The cæcal appendages were 46 in number, and nearly equal in size—about 1-10th of an inch in diameter, and 7-8ths of an inch in length. No entozoa could be discovered in either the stomach or intestines. The liver and spleen were both full and healthy, and the peritoneum over the whole cavity of the belly was glistening and silvery, and thinly dotted with dark brown spots. Compared with female Black-Tails of about the same length, from the Eden, in Fifeshire, the Esk, at Musselburgh, and from Lochgoilhead, in Argyleshire, the Carham specimen is thicker in the body, and 3 oz. heavier, and is quite as silvery as any of them, the only difference being that the one from the Esk has no spots on the

opercula. There can be no doubt that the Carham detenues are a (migratory species) veritable sea trout (*Salmo Eriox* or *Trutta*). Of this I am convinced, and I think, as far as the experiment has gone, it is a proof of the capability of the migratory species to live in fresh water, and to thrive under such adverse circumstances as want of space and natural food, being frozen up in winter, and almost parboiled in the dog days. Not only did they survive all those changes, but they now compare favourably with their fellows from the sea. This proof of the easy acclimatization of the migratory species of the river Tweed tends strongly to confirm an opinion I have long held, in common with many other persons, that the *Salmo Levenensis* is neither more nor less than the Sea Trout, being the offspring of those enclosed by the drainage of the lake and the erection of sluices at the source of the Leven, which effectually prevent either egress or ingress.

Supposing the Carham detenues were two years old when taken in their Smolt dress from the river, and weighed 2 oz. each, what might have been expected of them in such a home as Loch Leven, seeing that they have grown to the weight of 2 lb. under the disadvantages of artificial feeding, and an enforced residence of two years in a pond not more than 12 yards square, and in which there is very little current, except where a leader from a small burn enters it at one end?

A. B. STIRLING.

Measurements and Proportions of a Sea Trout from Carham Ponds.

	INCHES.			
Total length of fish,	-	-	-	13 $\frac{1}{2}$
Greatest depth of body,	-	-	-	2 $\frac{7}{8}$
Length of head,	-	-	-	2 $\frac{6}{8}$
Greatest girth of body,	-	-	-	6 $\frac{6}{8}$
Diameter of orbit and eye,	-	-	-	$\frac{4}{8}$
Distance from anterior border of orbit to the end of snout,	-	-	-	$\frac{7}{8}$
Length of maxillary bone,	-	-	-	1 $\frac{2}{8}$
Greatest width of maxillary,	-	-	-	$\frac{3}{8}$
Greatest width of operculum,	-	-	-	$\frac{5}{8}$
Greatest depth of operculum,	-	-	-	1
Distance from nape of neck to dorsal fin,	-	-	-	3 $\frac{6}{8}$
From hinder part of dorsal to origin of mort fin,	-	-	-	3

	INCHES.
From hinder part of mort fin to origin of caudal fin,	- $1\frac{2}{8}$
Greatest height of dorsal fin, - - -	- $1\frac{5}{8}$
Breadth of dorsal fin, - - -	- $\frac{7}{8}$
Length of pectoral fin, - - -	- $1\frac{5}{8}$
Length of vent fin, - - -	- 1
Breadth of anal fin, - - -	- $\frac{7}{8}$
Greatest depth of anal fin, - - -	- $1\frac{1}{8}$
Length of longest upper caudal ray, - - -	- $1\frac{6}{8}$
Height of mort fin, - - -	- $\frac{3}{8}$
Breadth of mort fin at root, - - -	- $\frac{1}{8}$

The greatest depth of the body is below the origin of the dorsal fin, and exceeds the length of the head by $\frac{1}{2}$ of an inch. The snout is conical and moderate in length, the mandible has no hook, and the jaws meet in perfect contact. The teeth of the mandible are very slightly larger than those of the maxillary bone, and there are 12 in each side. The vomerine teeth are 12 in number, 8 forming a longitudinal double row, *as seen through the soft part of the palate*, and 4 in a transverse series. There are 13 maxillary teeth, and 11 inter-maxillary. The tongue has 6 recurved teeth, which are much stouter and longer than any of the others.

The posterior margin of the præoperculum is slightly rounded, and the lower limb is distinct. The posterior margin of the operculum is slightly rounded, and meets the lower limb at an oblique angle. There are 117 transverse series of scales, counted just above the lateral line. The dorsal fin has 11 rays, pectoral 14, ventral 9, and anal 11.

A. B. STIRLING.

The Simonside Find. By Mr THOMAS ARKLE, Highlaws, Morpeth.

PLATE VII.

In August, 1868, a most remarkable discovery of bronze articles took place on Simonside Hills, near Rothbury. A son and daughter of Mr Ashton's, of Tosson Mill, were out on the moors gathering ferns, when the boy, in looking under the projecting edge of a rock, observed something uncommon. To obtain access part of the surrounding stones were removed, when a bronze sword and the blade of another one were found. Nos. 1 and 2.

On Mr Ashton himself going to the place, and removing a portion of the subsoil, he found near the surface two other pieces of bronze, Nos. 3 and 4, perhaps the handle and blade of a knife, three rings, Nos. 5, 6, and 7, and two other circular articles, Nos. 8 and 9, which may have been the bosses belonging to the swords found immediately above them. A bone, or piece of bone, No. 10, three and a half inches in length, was also discovered.

It is right to observe that another and perhaps more reliable account says, that on digging, an oblong stone was found, placed horizontally, with no other one of a similar size or shape near it, and that under this stone the articles, with the exception of the swords, were deposited.

The most perfect weapon had hilt and rivets complete, only the fitting up and ornaments which had been attached by the rivets being wanting. The length, including the hilt, rather exceeds twenty inches, the greatest width being nearly an inch and a half. The other blade had probably been severed from the hilt before being deposited, as at the place of breakage it is eaten away to nearly the shape of the other extremity, a circumstance which in some minds will raise doubts whether the article may not have been intended for something else than a sword.

All the articles had suffered much from corrosion, doubtless increased by the circumstance of their having been a good deal exposed to the action of the atmosphere.

An account of this discovery, and of a visit to the place by a certain personage of rank, appeared in the *Newcastle Journal*, of the 17th of September following, under the heading of "Finding of supposed Roman swords at Rothbury." The title of this paragraph affords a striking illustration of the tendency to designate everything which appears to be old by the name of Roman, and of the ignorance which may prevail not only amongst newspaper correspondents, but even (where it is less to be pardoned) amongst editors themselves. Neither of the parties seem to have been aware that whilst only one bronze sword has been met with in Italy, the home of the Imperial Empire, no fewer than three hundred and fifty have been discovered in Denmark, the surface of which country was never trodden by a Roman soldier.

T. ARKLE.

Notes on Birds. By Mr GEORGE MUIRHEAD, Paxton.

OSPREY (*Pandion haliaetus*).—An Osprey was observed frequenting the high rocks on the sea-coast near Burnmouth, in September, 1871; and about the same time one was found, unable to fly, in the dam at Netherbyres Mill. It was taken to the gamekeeper at Ayton Castle, but unfortunately was not preserved.

MERLIN (*Falco aesalon*).—A female in full plumage was shot by the gamekeeper at Paxton, in the "Well Mire" wood, on the banks of the Whiteadder, not far from the village of Paxton, in October, 1876. That wood is one of the favourite haunts of hawks in this locality. I have observed the Merlins there several times.

ROUGH-LEGGED BUZZARD (*Buteo lagopus*).—A fine specimen of this bird was obtained on the sea banks, near the Pier Field, Berwick-on-Tweed, in October, 1876, and is preserved in the Berwick Museum. The bird, when shot, had evidently only newly arrived from a migratory flight, for I was assured, that, on being observed it displayed little activity and was easily stalked. Several instances of the Rough-legged Buzzard having been killed lately in the neighbourhood of Gifford, East Lothian, have come under my notice. It appears to me to be evident, that this bird has occurred more frequently during the past season than usual in this country, for I have noticed many instances of its having been killed, recorded in the newspapers.

SHORT-EARED OWL (*Otus brachyotos*).—I have never observed this bird in the immediate neighbourhood of Paxton, although I have had every opportunity of doing so. Numerous specimens have been shown to me as having been killed in this county, and in East Lothian, during the past winter. A female was shot at Billylaw, near Berwick-on-Tweed, in the beginning of the present month (March, 1877).

GRASSHOPPER WARBLER (*Salicaria locustella*).—One night, in June, 1876, when I was returning from visiting some friends in this neighbourhood, while passing along the footpath by the side of Nabdean Mill Pond, I heard for the first time, the note of the Grasshopper Warbler. The song of the bird proceeded from amongst the whin bushes in the Silver Fir Strip to the west of Nabdean. Next evening when I went, accompanied by the gamekeeper here, to listen to the bird, it allowed us to approach

quite close to the bush in which it sat, and uttered its peculiar monotonous trill, resembling the continuous chirping noise made by large grasshoppers, which I have heard during summer nights in the Orleannais. Although I several times searched for the nest of the bird, I never succeeded in discovering it.

RAVEN (*Corvus corax*).—I was informed lately by Mr Leitch, Fairneyside, that on the 4th December last, his brother, Mr Robert Leitch, saw a pair of Ravens on the sea banks near Burnmouth.

HOPOE (*Upupa Epops*).—A Hoopoe was obtained near Innerwick, in October last. It had disabled itself by flying against the telegraph wires on the North-British Railway, and was caught by one of the railway officials.

KINGFISHER (*Alcedo ispida*).—Several friends who take some interest in birds, and who frequent the Whiteadder during spring and summer for trout fishing, have remarked to me, that they have not, of late, seen so many Kingfishers on the water, as they used to do. The severe and long-continued frost of the winter of 1875-76 may perhaps have had the effect of diminishing the numbers of this brightly coloured bird, on our beautiful and famous trouting stream. During that terrible winter, for several weeks, the Tweed and the Whiteadder were here almost completely frozen over, and all the rivulets which flow into them, were covered with ice and snow. Kingfishers, therefore, would be able to obtain little food, and, probably, many of them would die from hunger.

The WATER-OUZEL, the KINGFISHER, and the graceful little COMMON SANDPIPER, lend to the Whiteadder additional charms on pleasant spring and summer days, when the trout fisher is by the water's side. The Water-ouzel should be the greatest favourite, for it is evidently always in a happy mood, cheering the angler with its lively motions.

RING DOVE (*Columba palumbus*).—Comparatively few Wood-pigeons have been seen in this locality during the past winter. The vast flocks which appeared here several years ago, have been represented by only a few stragglers. I have shot not above a dozen, during the whole of the past winter, whereas, in the autumn and winter of 1875, I sometime shot, in the evening flight, a dozen Pigeons in the course of an hour.

WATER-RAIL (*Rallus aquaticus*).—A Water-rail was shot at

Nabdean Mill pond, last autumn, by the gamekeeper here.

GOOSANDER (*Mergus merganser*).—I have seen several of these birds in the Whiteadder during the past winter.

RED-THROATED DIVER (*Colymbus septentrionalis*).—A Red-throated Diver was caught near the village of Hutton, in November last. It was unable to fly, and had been apparently driven inland by the previous stormy weather.

Zoological Notes. By ANDREW BROTHERSTON, Kelso.

MONSTROSITY IN DOMESTIC GOOSE.—On May 28th, 1876, I preserved a young Goose, which had three legs; it was otherwise perfect. The extra limb was situated behind the others, and like many instances of the same sort, it was a union of two that were imperfectly developed. It was not articulated to the body, but hung loosely, so that it could not have been used in walking if the bird had lived, which it did for a few days only. It was most likely the produce of a double-yolked egg.

BLACK WATER VOLE.—Although this variety of the Water Vole—or perhaps distinct species—has been overlooked in this district until lately—"Proc." viii., p. 286—I believe if looked for, it will prove to be not uncommon in this neighbourhood. In addition to the island at Sharpitlaw, I have seen it from other two localities—one four miles down the Tweed, the other about four miles up from here. One, an adult male, was shot May 13th, 1876, by Mr Cowe, in the mill-dam at Lochton, Berwickshire. The other I saw at Trows Crags, Roxburgh, on the 14th of June following. Like the one formerly noticed, they were not so large as the Common Water Vole.

TUFTED DUCK (*Anas fuligula*) BREEDING (?) ON THE BORDERS.—From seeing two—male and female—of these birds on Yetholm Loch, May 27th, 1876,* I think it very probable that they would nest there. I was there again in July, but owing to the high wind blowing at the time, could not see them. I had not the opportunity of seeing them again until the autumn, after the

* On May 2, 1877, I counted about fifty Tufted Ducks on Yetholm Loch, and on May 26, I saw eight pairs on the same Loch. On Hoselaw Loch, on the same day, there was a larger number.—A. B.

fresh arrivals from the north had come, but I learned, on good authority, that they were there near the end of June. Thinking that they were disabled birds that could not go with their companions when they left, I alarmed them, when both rose and flew in a manner which shewed that if ever they had been wounded, they were then all right; but I think it very likely that they were unable to go when the others left, as if they stopped from choice, out of the large flocks which visit us every winter, many more would remain to breed with us.

MOTTLED MALLARD (*Anas boschas*), PENN.—It is rare to find a Mallard not of the normal colour. One got near Smailholm, June 23rd, 1876, had numerous white spots scattered over it, the prevailing colours being the same as usual.

LARKS FEEDING THEIR YOUNG IN CONFINEMENT.—When it is wanted to bring up a nest of Starlings, Bullfinches, or other birds, it is a common practice to get the old birds to feed their young until they are able to do so themselves, by placing them in a cage, and removing it gradually away from the nest, to where they are intended to be kept. But the following circumstance is, I think, worth recording.† A bird-fancier here, found a Lark's nest with three young ones, and wishing to capture the old ones also, he placed a few "lime-twigs" near the nest, and soon secured both parents. After taking them home, he put them all into one cage, placing a sod in the bottom, also some boiled eggs, worms, &c. Whenever the young birds began to call for food, the male commenced feeding them, and continued doing so, the female rarely assisting, even after they could eat.

THE DUNLIN (*Tringa variabilis*), SELBY.—An old male was killed on the edge of Yetholm Loch, in the end of July, 1876, and I had another, a young bird, August 11th, which was killed by flying against the telegraph wires near Haddon; from which it is probable that they breed in this district. They were very plentiful in the neighbourhood of Berwick, during the last winter and spring (1876-7).

LATE NESTING OF THE QUAIL (*Perdix coturnix*).—On the 6th of September, 1876, a nest containing nine eggs, was found by the reapers, in a corn field on the farm of Kersquarier, about 2 miles east from Kelso. It was a high lying field sloping to the south.

† Morris refers to similar instances of Lark's feeding their young when captured with them.—("Brit. Birds," ii., 185).

Nearly every year a few Quails are got in this neighbourhood, but this is only the second nest that I am aware of having been found. (See p. 500 of last year's "Proceedings," see also p. 515). Mr Gray mentions, in his "Birds of the West of Scotland," an instance of the Quail nesting later—on 4th October, 1851. In the last week of December, 1876, an adult female—now in Berwick Museum—was shot on Berwick hill, near Scremerston.

OSPREY (*Pandion haliaetus*), SAV.—An adult female, in excellent plumage, was shot on September 25th, 1876, by Mr J. Kerss, on the Tweed, about two miles below Kelso. Attention was first directed to it, by the great commotion amongst the rooks and other birds, which were making the Osprey's quarters, in a small plantation on the river side, rather too hot. This is a very beautifully marked bird, the ground colour of the upper parts being dark brown, all the feathers having very light coloured or white tips and margins. Under parts white, except a broad ferruginous band across the upper part of the breast and the under tail coverts, which are very pale yellowish brown. Its dimensions were—length from bill to tail, 1ft. 11in.; expanse of wings, 5ft. 6in.; weight, 3½lb. The last that was killed in this district (at Floors, May 24th, 1873, see "Proc." viii., p. 132) was about the same dimensions, but weighed 3¾lb. Mr Morris, in his "Brit. Birds," gives the weight of the Osprey—"male between 4lb. and 5lb." and of the female "sometimes above 5lb." It appears to me that there is some mistake here, as the two birds mentioned above were adult females, and both in good condition. (This fine bird is in Mr A. Steel's collection).

ROUGH-LEGGED BUZZARD (*Buteo lagopus*), FLEM.—On the 19th of October, 1876, a male, in very fine plumage, was shot from Berwick Pier. It was 21¾ inches long, 52 inches from tip to tip of wings, and weighed 21½ ounces. When opened the stomach was completely empty. From its tired appearance, and the fact that others were reported from various parts of the country about the same time, it would appear to have but newly arrived on our coasts. The unusually large migratory flight which came to this country in the autumn of 1875, arrived nearly about the same time.

FOOD OF THE HOODED CROW (*Corvus cornix*), LINN.—It is generally supposed that nothing short of necessity will force the "Hoodie" to feed on any sort of vegetable diet. But that such

is not always the case, the following fact will show :—I dissected one, a male, which was shot near Yetholm, October 20th, 1876, the stomach of which was full of beetles and barley, about equal parts of each. As there was no scarcity of animal food at the time, it must have been from choice that the barley was eaten. Although not an uncommon bird on our coasts during the winter and spring, it is comparatively rare so far inland, only stragglers being met with—occasionally a pair. I have seen only one since, (December 13th), it was flying up the Teviot above Roxburgh bridge.

LONG-TAILED DUCK (*Anas glacialis*), PENN.—Judging from the number of specimens, and information received, during the months of November and December, the Long-tailed Duck was plentiful about the mouth of the Tweed. All that I saw were immature.

MERLIN (*Falco aesalon*), PENN.—The Merlin like all its congeners, although not yet what can be called rare in this district, I am sorry to say, is annually becoming scarcer, so much so that I only saw one in 1876. It was shot near Kelso, 30th November.

CURIOUS CAPTURE OF A BARN OWL.—As the first train in the morning of December 13, 1876, was going at full speed between Kelso and Roxburgh, the driver observed the funnel of the engine strike a bird, which was attempting to “cross the line.” Owing to the rate at which the train was going, it could not fly off, but remained in front of the funnel, until he went forward and secured it, when it proved to be a Barn Owl.

WHITE-FRONTED GOOSE (*Anser albifrons*), JENYNS.—Mr Robertson, of the Goswick Coast Fisheries, shot an adult female in Goswick Lowe, on December 9th, 1876. It was a very fine specimen shewing the white “front,” and the dark bars on the breast very distinctly. The markings on one side of birds in a wild state, are generally a counterpart of the other; but in this instance the dark bars below were unequal; on one side, though irregular, they were quite distinct and separate, while on the other they were run together—almost wholly black. Sometimes the breast on old birds is entirely black, usually it is irregularly barred. The Laughing Goose, though plentiful in some parts of the country, appears to be a very local species, generally only stragglers being met with. It is uncommon on the Borders, the only other examples that I have seen were some immature birds in Mr Steel’s shop, a few years ago.

SMEW (*Mergus albellus*), PENN.—Near the end of December, 1876, Mr Scott, who has been exceptionally fortunate in picking up many rare specimens for the Berwick Museum, obtained an immature male of this singularly neat bird. It was hanging in a poulterer's shop in Berwick, when he observed it; unfortunately he could not learn where it was shot, but in all probability it would be near Berwick.

FOOD OF THE CORMORANT (*Pelecanus carbo*), PENN.—To any person who has not seen the contents of the stomach of one of these voracious birds, it seems incredible, the number and size of the fish that they are able to contain. In one, an immature bird, which was shot near Paxton, in the early part of January, 1877, besides the remains of several nearly digested fish, there was a Bull Trout (*Salmo eriox*, Linn) which was 17in. in length, and I have no doubt that it could have swallowed one still larger. The process of digestion was going on throughout the whole length of the stomach most rapidly at the lower end where the head of the fish was.

DOES THE WATER VOLE BECOME TORPID IN THE WINTER?—In the stomach of a Heron which was shot near Nenthorn, January 23rd, 1877, I found a full grown Water Vole. It has been supposed by some naturalists, that it becomes torpid during the cold months. If so, the presence of this one in the Heron's stomach, may be accounted for by the uncommon mildness of the last winter. But I think it more likely that, instead of becoming torpid, the Voles retire to the inner recesses of their holes which are sometimes very extensive, and live on the stock of provisions which they have accumulated for the occasion. They have also been found at the same season a long way from water. White, in his "Natural History of Selborne," Let. xxvi., dated December 8th, 1769, mentions one which a neighbour turned up when ploughing a dry chalky field, far removed from any water, "that was curiously laid up in an *hybernaculum*, artificially formed of grass and leaves. At one end of the burrow lay above a gallon of potatoes, regularly stowed, on which it was to have supported itself during the winter."

GLAUCOUS GULL (*Larus glaucus*), BEWICK.—Several White-winged Gulls were noticed in the neighbourhood of Berwick, in the early part of 1877—possibly both the Glaucous and Iceland Gulls would be there, but of the former only can I be certain,

Mr T. Darling was fortunate in securing one of them, an immature male, the dimensions of which were—length, 29 inches; expanse of wings, 64 inches; length of wing from flexure, 19 inches.

GOOSANDER AND EEL.—On February 10th, 1877, I found in the stomach of a Goosander, which was shot on the Tweed, near Birgham, a partially digested Eel, about 16 inches in length. Eels are generally supposed, where they have the opportunity, to go to the sea during the winter, or at least to brackish water, where the temperature never gets so low as where it is fresh, and even when there they bury or hide themselves in the mud or under stones during the winter. From finding this one in the Goosander, on February 10th, it would appear that such is not always the case—although it is possible that it might have been caught near the sea—or the exceptionally mild weather at the time, may have something to do with it. Goosanders have been more than ordinarily abundant in this district during the past winter. They were for the most part young birds.

GOLDEN EAGLE (*Aquila chrysaetos*) IN THE CHEVIOTS.—An immature female—(the Ring-tail Eagle of Pennant)—was shot on the 13th of February, 1877, by Mr A. Douglas, one of his Grace the Duke of Roxburghe's gamekeepers, on Biglaw, one of the Cheviots. It had been frequenting the district for about a fortnight previously. Rabbits appear to have been its chief feeding during that time; a shepherd saw it drop one, which it was carrying, and when I dissected it, the entrails of a rabbit and a few bits of bone were all that the stomach contained. The bones were apparently the indigestible parts of a former meal, while the entrails seemed to have been eaten a very short time before the bird was shot. So far as I can learn it was not disturbed from its last meal, thus favouring the opinion that Eagles prefer the intestines to the flesh of an animal. It was in excellent plumage and condition, being very fat; weight, 10½ lbs. (would be more when newly killed); length from bill to tail, 3 feet; wing from flexure, 2 ft. 3 in.; expanse of wings, 7 ft. 3 in.; tail, 15 in., extending 3 in. beyond the wings when closed. The number of scales on the different toes were—middle, four; outer and inner, three each; hinder, three large and one divided in the middle. The pointed feathers on the head and neck are bright rust colour, lightest at the tips; above and below the prevailing

colour is a rich dark brown. Primaries and secondaries, very dark brown, almost black. Upper part of the tail ashy grey (not white as usually described), the dark bar across the end is three inches broad in the centre feathers, gradually increasing in width to the outer ones, where it is five inches wide. At no very distant date the Golden Eagle bred regularly on the Cheviots; even so recently as the early part of the present century—according to Sir Wm. Jardine—one or two pairs used to breed on the wild range of the Scottish Borders. Now it is very rare that one is seen on the Borders. Indeed, so far as I am aware this is the only authentic instance of a capture of the Golden Eagle in this district for many years.* Judging from newspaper reports, they are not uncommon, but when inquiry is made concerning them—if an eagle at all—it turns out to be the Erne, or Sea Eagle, that has been obtained, and not the Golden Eagle. There was an Erne captured at Chester Hall, near Greenlaw, a few years ago, and another shot on the adjacent estate of Marchmont, on February 7th, 1877. Both went the round of the newspapers as Golden Eagles. I have not seen either of the above two birds, but from the description of those who have seen them, I have no doubt, whatever, of both being Sea Eagles. Surely two birds so distinct as these two are, ought not to be confounded by those reporting them. Whatever may be the age or sex, there is no difficulty in discriminating between them, a glance at the *tarsi* alone being sufficient. The *tarsus* of the Golden Eagle is feathered to the toes, while that of the Erne is bare almost to the “knee.” There are other good distinctive characters, such as the number of scales on the toes, &c., but it is needless here to particularise them. The Golden Eagle is a much rarer bird generally than the Erne. “Capt. Cameron states, with a view to show the comparative numbers of the Golden and White-tailed Eagles, that out of sixty-five Eagles he has killed or caused to be killed, only three were of the first-named species.” (*Birds of the West of Scotland*,” p. 5). Many people express surprise that this one was found so far from its regular haunts. But when we take into consideration their powers of flight, and also their wandering habits in the autumn and winter months, it is

* Sir W. Elliot, quoting from Turnbull’s “*Birds of East Lothian*,” mentions one which was caught in a vermin trap, near Coldingham, in March, 1876 (“*Proc.*” vii., p. 319).

not so much to be wondered at. Like most rapacious, and also some other sorts of birds, the young of the Eagle, as soon as they are able to shift for themselves, are expelled by their parents from the district where they were reared. From the north or west of Scotland, where are now to be found the only breeding places of the Golden Eagle in this country, a few hours direct flight would bring them to the Borders.

FOOD OF THE BLACKCOCK.—The crop of one which was found dead—March 14th—in a plantation near Kelso, where it is supposed to have met its death by flying against a tree, was full of the leaves of *Medicago lupulina* and *Alchemilla arvensis*.

MOULTING v. CHANGE IN COLOUR OF FEATHERS IN HEAD OF BLACK-HEADED GULL.—With regard to the change in colour of the head, in the spring, of the Black-headed Gull, Yarrell observes:—"A Gull in the collection at the Garden of the Zoological Society, began to change colour, in the head, from white to dark brown, on the 11th of March; no feather was shed, and the change was completed in five days." The same is quoted by Prof. Rymer Jones in "Cassell's Book of Birds," and Mr Morris, in his "British Birds," refers to the same occurrence, and says that "the feathers are not shed, but the colour is changed," and makes no remarks, the same as if it was an established fact. In moulting the feathers are shed gradually, so that the black feathers which replace the first shed white ones would be full grown before the last had fallen, thus apparently shortening the time in which the change would take place. That it is the result of moulting—in some cases at least—I am thoroughly satisfied. On the 15th of March, 1876, I examined the head of an adult male, in which the change was nearly completed; only a few scattered white feathers were left, all of which were old and easily detached—so much so, that excepting a few at the base of the bill, they came off when skinning it. The black feathers on the contrary were all young, new, and in various stages of growth, some fully developed, others just appearing. The inside of the skin was thickly dotted with the dark coloured roots of the young feathers, thus exhibiting every appearance of a complete moult. I examined several examples of the same species in March, 1877, all of which shewed unmistakeable signs of moulting on the head, and also over the rest of the body (excepting the large feathers). Besides the Black-headed Gulls (*Larus*

ridibundus, Penn.), I examined, during the same month, examples of other three species of Gulls—including both sexes—viz., the Common Gull (*L. canus*, Linn.), the Great Black-backed Gull (*L. marinus*, Penn.), and the Herring Gull (*L. argentatus*, Bewick). All of these were in various stages of change from the winter to the breeding plumage. In some, the dark streaked feathers which indicate the winter plumage on the head and neck, were entirely shed, in others only partially; but in every case the change was clearly the result of moulting. If it is admitted that the assumption of the summer plumage on the head by any species of Gull, is the result of a moult, I think it necessarily follows that the change in others of the same genus is most likely to be effected in the same manner. From experience, I find that many other species of birds—possibly all—moult to a certain extent in the spring, especially about the head and neck. There are several birds that apparently alter their colour without a corresponding change of feathers, such as the Chaffinch, Brambling, Starling, &c., but the change with them is caused by the ends of the feathers becoming worn and rubbed off. It is probable that feathers do sometimes change colour, but I believe it will be confined principally to the large ones. If members of the Club, who are interested in this subject, and have the opportunity of obtaining specimens of the Black-headed Gull, will examine any examples that they may come across, and send a report of their observations to Mr Hardy, they would help to settle this question, about which there is much difference of opinion. In most seasons, the early part of March will be the best time for making observations on them.

Zoological Miscellanea and Extracts from Correspondence.
By JAMES HARDY.

DAMAGE TO TREES BY THE WATER VOLE.—Last year I planted some Sycamore trees, about one inch in diameter, up a brook side here; and late in the autumn on taking hold of them to see that they were firm in the ground, they came up. I did not pay much attention to them; I imagined that some idle boy had cut them up and thrust them into the soil again. About a month ago, I saw a Willow tree, about 8 feet high, lying on the ground by the side of the same brook; I pulled it across, and to my surprise, I found that the roots had been gnawed in two; the roots were 3 inches in diameter. This, no doubt, was the work of the Water Rat. I then went to the Sycamore trees and found they had been cut off by the same agents.—Rev. J. F. BIGGE, Stamfordham, 22nd May, 1876.

Mr Hughes, of Middleton Hall, mentions that the Water Vole has cut through several young ornamental Oaks near his place, planted near a pond frequented by it.

SQUIRRELS.—Squirrels abound in Fowberry Park plantations, *alias* Trickley Wood, to such a degree, that the Earl of Tankerville's keeper has received directions to diminish their numbers. They are very hurtful to fir woods by destroying the tops of the trees. They begin to bark the trees at the top, and then strip off the bark downwards, to reach the *kell*,* which is their favourite luxury. The keeper told me he had shot 15 within the last week (June, 1876); and that in the back end of 1875, he had destroyed 180. The Squirrel is a nervous timid animal. One that he had caught and enclosed in a handkerchief, broke its heart for terror. I once saw a Squirrel after running along the ground before me, under a thicket of trees, take a fit at the foot of a tree. After struggling for a time, it recovered, and ascended the trunk, and then rattled away among the branches, as merrily as if it had never succumbed to weakness. I had come upon it by surprise.

ERNE OR SEA EAGLE (*Haliaeetus albicilla*).—According to several newspaper announcements, Mr Smith, gamekeeper, Marchmont, when out shooting, on Feb. 7, 1877, observed a very large bird

* *Kell* of an egg (in the Northumberland dialect) is the skin below the shell; of an orange, the skin enclosing the segments; any thin skin or membrane.

hovering above him. He shot it, and found it to be an Eagle. As reported it was taken to be a Golden Eagle, but it proves to be an Erne. Through the interposition of Sir Hugh Hume Campbell, Bart., it was procured for the Berwick Museum. Two other Eagles had about the same period frequented that neighbourhood. Again, on the 17th March, a noble specimen of the Erne was shot by the Earl of Ravensworth's gamekeeper, in a pine wood upon Thrunton Moor, near Whittingham, Northumberland. Its weight was 9 lbs., and the expanse of the wings from tip to tip was 6 feet 7 inches.

COMMON BUZZARD (*Buteo vulgaris*).—A Buzzard (Common) was shot at West Thirston, near Felton, on May, 1876, by John Crisp, watcher to Mr Riddell, of Felton Park. It was preserved by Wm. Dobson, of Thirston, and is now in the possession of Andrew Smith, of West Thirston. A Common Buzzard was shot at Longhoughton Low Stead, on 16th September, 1876, by Mr Grey, the tenant of the farm, and has been preserved by Mr Dixon Burnett, of Alnwick, in whose shop it may at present be seen.—R. G. BOLAM, Weetwood Hall, 7th Nov., 1876.

ROUGH-LEGGED BUZZARD (*Buteo lagopus*).—Mr Thomas Elliott, gamekeeper at Lilburn Tower, writes of date 13th Nov., 1876, "Two beautiful Rough-legged Buzzards have been trapped on Ilderton Moor, by James Gibson, rabbit-catcher. One was caught on Tuesday, the 7th of this month; the other on the 30th October. They are supposed to be male and female. The birds are both stuffed by James Gibson. Another has been seen since on Ilderton Moor." Again of date, Feb. 25, 1877, he says, "Five Rough-legged Buzzards have been caught at Ilderton lately." On the 29th Dec., 1876, being at Weetwood Hall, I had much pleasure in seeing one pass, in calm orderly flight, at a considerable height. The Wood-pigeons from the fields within a considerable area, where they were feeding on the turnip foliage, gathered in pursuit of it, but it appeared to pay no regard. It is said that it cannot resist a rabbit bait.

HONEY BUZZARD (*Pernis apivorus*).—A very fine example was shot on the 29th May, 1876, by one of the keepers on the Dungallass estate, in Penmanshiel wood. His attention was called to it, by the persecution it met with from the Carrion Crows, of which about twenty attacked it, while it was perched on the top of a tree, whence it sallied forth on its sable tormentors, which

then fled with wild outcries. It flew sluggish like an Owl. I examined it the same evening. It is now preserved by the gamekeeper at Dunglass. Mr Robert Gray states of date 18th October, 1876, that a very dark coloured Honey Buzzard was shot at Pencaitland, about a month previously.

FIELDFARE.—Fieldfares were numerous near Belford in the end of December, picking up food in the open fields, among cattle and sheep. There was a very large assemblage at Fowberry Moor, on the 22nd of that month, in turnip fields where sheep were folded. Snow came on, and on the 2nd January, 1877, the Fieldfares betook themselves to the wild fruits which had hitherto stood untouched. Again on January 3rd, they were engaged stripping the haws from the hedges; and all across Cold Martin Moss, there was a movement of birds feeding on cranberries. Apparently these would have been left untouched, had more congenial supplies not been obstructed. A few Redwings accompanied the Fieldfares on the low district near the Till.

RING-OUZEL.—Several birds were still frequenting the top of Ras Castle, in Chillingham Park, when I visited it on the 17th October, 1876. A few pickings of bilberries might still remain to attract them.

ON STONE-CHATS NESTING IN RABBIT-BURROWS.—I think I can quite satisfy you about the nests I spoke of being Stone-chats and not Wheatears. I have watched the birds on several occasions sitting close to the mouths of the rabbit-holes, and seen them go in, and on one occasion found a nest in this way; though it had no eggs at the time. A man who lives on the Old Law, above Ross Links, also described the nests to me (which he had seen in rabbit-holes) as having blue eggs spotted with brown; he knew the birds well by the name "Stone-chats," and seemed well informed about birds generally. Also, though I have watched and seen the Stone-chats go into the holes often, I have never seen a Wheatear at all in these parts. When I was at St. Andrew's, in 1875, I found them breeding in rabbit-holes in the same way, and have also seen them go into the holes at Barmoor. The nest I found at Ross exactly corresponded with the other Stone-chats' nests I have found, besides the fact of the bird going in and making a great deal of noise when I went to the nest.—A. H. EVANS, Scremerston, January 15, 1877.

OCCURRENCE OF THE WOOD-LARK (*Alauda arborea*), IN NORTH-UMBERLAND.—I have intended for the last month offering a contribution to your interesting “Notes on Natural History,” in the Club’s Transactions, and as I find I shall be unable to attend the meeting of the members to-morrow, I shall now send it you in writing. It is about the *Woodlark*. After midnight, on the 18th June, I heard one singing opposite to my own house. The bird was not on the wing, but whether it was on the ground or perched I cannot say, as I did not see it. I went out on the three following nights (19th, 20th, and 21st) about midnight, and heard it on each occasion in full song. On the morning of the 22nd, we had a severe thunderstorm, and again in the evening heavy rain, and that night my friend was silent. The next time I heard it was, I think, the next day, from the opposite side of the house whilst sitting at dinner—of course much earlier in the evening. Two or three times I could distinguish it whilst the other birds were still in full twitter, but it was at night when it alone was singing that every note of its charming song could be distinguished. The first night I heard it, I was almost deluded for a minute with the belief that I was listening to a Nightingale. Yarrell says “they are said” occasionally to sing during fine summer nights, so I presume he had never heard one. He adds that Mr Selby calls it a scarce bird in Northumberland, but Mr Selby does not specify Northumberland in particular, and merely says it is confined to the south and west, but I do not fancy they are by any means so rare as he would imply. I heard it once or twice besides the occasions I have specified, but it is either now silent or has left the locality.—**THOMAS TATE**, Belvedere, Alnwick, 25th July, 1876.

CHAFFINCH.—In June, on the public road near Flodden, I remarked a female Chaffinch seize a black beetle, and then let it run, and capture it again, for a young bird chirping for food, that accompanied it.

GOLDFINCH.—Mr Ferguson, on the 9th February, 1877, observed a few Goldfinches at Thornydykes, near Westruther; and Mr George Bolam, in the end of December, 1876, came on a small flock near Weetwood Hall.

SISKIN.—Mr George Bolam saw several in December in a small plantation between Weetwood and Horton. A flock of Siskins again this winter visited the Alder trees on the Lillburn.

CROSS-BILL.—Mr T. Elliott writing from Lilburn Tower, says, "I took note of the Cross-bills, in the month of September, being in some of our covers; and have seen them since, both on the wing, and feeding on the Scotch Fir trees. They are about seven in number." (Feb. 25, 1877).

HOODED CROW (*Corvus Cornix*).—The Hooded Crows during the winter of 1875-6 commenced to roost in Braxton high woods, in East Lothian. They are accustomed to do that in the woods of the Earl of Wemyss at Gosford.

GREAT SPOTTED WOODPECKER (*Picus major*).—Some years since three of the Great Spotted Woodpecker were seen in Penmanshiel Wood; one was seen below the Tower farm. One of the birds was shot, and is preserved.

EARLY AND LATE CUCKOOS.—In the climate around South Charlton Vicarage, our friend, the Rev. W. I. Meggison, appears to enjoy immunities not experienced by others during this most changeable season. Of date, Feb. 26, 1877, he writes; "I have thought that it may be interesting to you to know, that on Feb. 4th, a Cuckoo alighted on my garden wall, rested for half a minute, and resumed his flight. I saw it again the next day skimming along the same wall; but could not mark it down. A hibernated specimen I presume." Again of date, March 19. "I have seen my friend the Cuckoo once again—last week—but have not yet heard his note. Mr Calvert Chrisp, of Hawkhill, picked up in November last, in his garden, two young Cuckoos in a very exhausted condition. He took them into the house but they soon died."

GOATSUCKER.—The Goatsucker frequents Trickleŷ wood, and nests there. While hawking it gives a rapid snap, snap, with its wings backwards. It is known there as the *Night Jowl* (i.e. Jar), and *Night-hawk*.

WOOD-PIGEON.—The Wood-pigeon is very numerous in Trickleŷ wood among the young plantations of young Fir, where one can look into their nests, and a basketful of eggs could be collected in a very short time. The keeper says that they feed a great deal upon the large Blaeberries that abound in the woods there.

ON A HEN WHICH MOULTS ALTERNATELY BLACK AND WHITE.—"*Hutton Manse*, Aug. 14, 1876. About six years ago, we procured a setting of the eggs of Spanish fowls, from Paxton

House. Several birds were hatched, and they were all of the proper type,—as to colour, shape, white ears, &c. One of the hens, when two years old, began to turn white at the period of moulting,—and lost all her black feathers. Next season, she lost all her white feathers, and became black as at first. Last season, she again lost her black suit,—and is, at present, altogether white. I know of no reason for these changes.”—*Extract from a letter from the Rev. Dr ROBERT KIRKE, to Dr COLVILLE BROWN, Berwick.*

THE PHEASANT AND ITS NATURAL FOES.—On the 7th November, 1876, while in the garden at Woodside, about two o'clock p.m., I heard the crowing of a Pheasant in the adjoining field, and looking over the hedge was surprised at seeing at a distance of about 200 yards, a couple of fine cock Pheasants pursuing a *cat*, a common jungle looking animal, up the field in the direction where I stood. I watched them till both the cat and the Pheasants disappeared through a gate a few yards to my right. I then quietly left the garden, and came round to the home offices, where I saw the two Pheasants emerging from a small plot of Jerusalem artichokes behind the garden. They walked away quietly when they saw my approach. On coming through the stable yard I found my brother, Dr Charles Douglas, surrounded by a number of fowls, hens, and young chickens, who were making a loud cackling noise, which he informed me had been caused by the appearance of a strange cat, whom they were pursuing in a very excited state. The cat had disappeared amongst the laurels surrounding Woodside House. The whole occurrence struck me as very strange and unusual; here were a couple of Pheasants, generally the prey of *fera natura*, actually in pursuit for two or three hundred yards, of their arch-enemy; and after the Pheasants' disappearing from the scene, the antagonism taken up by domestic poultry, which were perfectly accustomed to the presence of several domestic cats, who wander about the premises without attracting the slightest notice from them.—F. DOUGLAS, M.D., Woodside, Kelso.

QUAIL.—With reference to the Quail being indigenous at Springfield, in East Lothian, Mr Black, farmer, Cocklaw, remarks, that to his own knowledge, they have been there for the past eighteen or twenty years. His brother-in-law, Mr Scott, he also states, once shot a Quail at Woollands, another farm in that neighbourhood.

LITTLE BITTERN (*Otis Tetraz*).—A specimen of the Little Bittern was shot by Mr John Chrisp, at Hawkhill, about four years ago.—Rev. W. J. MEGGISON.

HOW THE GREEN PLOVER IN FEEDING ON THE GRASS STARTS HIS PREY.—The Rev. F. R. Simpson, North Sunderland, communicates the following curious observation on the habits of the Lapping:—"The bird when feeding on grass land systematically hunts over the sward. Standing firmly on one leg, it shakes the grass with the other (which it keeps in advance) with a quick vibratory motion, pressing on it, and so startling any insects that may be harbouring there. On these when roused to motion, it suddenly stoops, picks them up, and advancing a few feet resumes the operation in a fresh place. With a large flock on a field, the whole surface must in this way be pretty closely tested. This accounts for the seemingly odd way in which the birds after standing still, as it would seem to one at a distance, suddenly run forward a little, and as suddenly stand again."

THE REEVE.—Dr Stuart writes from Chirnside, 11th September, 1876, as follows: "Two rare birds made their appearance at Edington Mains, in the mill pond, the other day. The groom shot one, but the other escaped. Mr Wilson sent the shot bird to Dr Duns, of the New College, Edinburgh, who made it out to be the Reeve, the female of the Ruff, *Philomachus pugnax*. I should also mention that the bird which escaped was a young bird, much lighter in the plumage than the one shot. The Reeve was observed to be feeding it with insects from the pond, which proves that it must have been bred not far off."

LITTLE AUK (*Mergulus melanoleucos*).—A Little Auk was shot, by Mr J. R. Wood, of Foulden Bastle, on the north side of Foulden estate, near Lamberton moor; December, 22, 1876.—*Berwick Advertiser*, December 29, 1876.

In continuation of his previous notes, Mr Robert Gray sends the following:—

ROUGH-LEGGED BUZZARD (*Buteo lagopus*).—A male and female were captured at Innerleithen, on 28th April and May 1st of the present year, and sent to Mr Hope, Edinburgh, for preservation. It is not unlikely this pair would have nested in the district had they been left undisturbed.

FIELDFARE (*Turdus pilaris*).—I had an opportunity of examining a newly killed pair—male and female—from the neighbourhood

of Edinburgh. They were both shot on the 2nd May, and were in perfect breeding plumage. I have since been informed that up to this time (May 19th) many pairs are seen flying about the same locality.

GREEN SANDPIPER (*Totanus ochropus*).—A male was shot near Chirnside, Berwickshire, on 1st May, and sent to Mr Hope for preservation.

PIED FLYCATCHER (*Muscicapa atricapilla*).—A male was shot at North Berwick, on 12th May, and forwarded in the flesh to Mr Small, George Street.

RARE BIRDS IN THE VICINITY OF DUNSE.—I am indebted to Mr Robert Waite, taxidermist, Blinkbonnie, Dunse, for the following interesting account of his acquisitions during the past season. The letter is dated 24th Feb., 1877: "I have much pleasure in giving you all the information I know regarding the rare birds which have come into my hands. In November, 1876, a Large Spotted Woodpecker (*Picus major*) was shot at Threeburn Grange, Coldingham. In the same month, the Sentinel Butcher Bird (*Lanius Excubitor*) was found dead in a garden in Dunse. Another was seen at the same time about a mile further south, but not captured. About the beginning of January, this year, a female specimen of the Red-headed Duck, Dun Bird, or Pochard (*Fuligula ferina*), was shot on the Whitadder, above Cockburn. In November, 1876, the Marsh Owl (*Otus brachyotus*) was shot at Quickwood; also at the same place, a Harrier, was shot in the middle of January, 1877. In the same month, about the middle, a Gannet (*Sula Bassana*) was captured alive at Dunse Castle pond, in good condition. Three Eagles were seen for about *three weeks* in Dunse Castle woods, last month, since which two have been shot, one (an Erne) at Marchmont, and another (a Golden) in Roxburghshire. About the end of January, two Goosanders (male and female) were shot on the Whitadder, at Abbey St. Bathans. Lastly, on hand, just now, a Common Buzzard, in immature plumage, which was captured on Thursday last, about two miles north-east from Dunse."

ASTYNOMUS ÆDILIS.—On the 1st of September, Dr Paxton of Norham, sent me a very fine Longicorn Beetle, with the following notice; "The insect enclosed was found by a lady in her parlour at Tweedmouth. She tells me that it squeaks like a mouse, when the antennæ are touched." The box, supposed to contain

it, arrived by post, apparently empty; and I was surprised a few days afterwards to see an odd-looking insect at rest, on the window-frame, which immediately commenced its wheezing noise, on being disturbed. Perhaps it had got out into the envelope. It is the *Astynomus Edilis*, a native of Scandinavia. It is said to be plentiful on the Quayside at Newcastle, having been introduced with timber. I am not aware of a previous arrival of a similar stranger at the port of Berwick.

On the Ornithology, &c., of Bowhill, Selkirkshire. Communicated by Mr JAMES KERSS, head-keeper to His Grace the Duke of Buccleuch, at Bowhill.

The most recent rare birds that have been killed here, are—the Lesser Butcher Bird, the Black-throated Northern Diver, the Tufted Duck, and the Pied Smew. The Smew is rather rare—so much so, that I believe there is not a specimen of that bird in the Museum in Edinburgh at present. I once shot a Smew, or White-headed Nun, on the Teviot, near Kelso—about 50 years ago—which should now be found in the Kelso Museum; any how it was sent, I am sure, to the Kelso Museum, at the time. Woodcocks, within a very few years breed very commonly here; particularly and observable since the Duke gave an order out, that no Woodcocks were to be shot after the 1st of March. Woodcocks will breed in close wooded places, but more generally in the open, where there is heather. No Dotterels frequent this part of Selkirkshire to my knowledge. The Merlin Hawk is common; the Osprey, or Fishing Hawk, occasionally occurs. The Rough-legged Buzzard, some winters is very common. Some 12 or 14 years ago, upwards of a dozen of these Buzzards were trapped here. Only one Jay has been killed here in my time, now upwards of 40 years. One or two nests of the Goat-sucker I have known of here. Siskins are very common, and Mountain Linnets; Blackcock game is common here, and Red Grouse. The Ring-ouzel, or Heather Blackbird, breeds in rocky glens among the hills, the nest being generally on the ground; the Dipper, or Water-ouzel, breeds commonly in all the hill burns here; and Kingfishers occasionally. Crossbills are not

common; yet they visit the woods here occasionally. The Redstart is not very common, but I find the bird now and then about old buildings. I have only seen one Quail here, and that was upwards of 35 years ago. The Common and Lesser Snipes breed on the hills here, but they are by no means plentiful since drainage became so common throughout the whole country. Two specimens of the White Tailed, or Sea Eagle, have been killed here during my time; and one Marten Cat, the same as is found common in the Highlands of Scotland. The Common Hen Harrier (male) and Ring-tailed Hawk (female) are seen here occasionally, but they are by no means common.

*Donations to the Berwickshire Naturalists' Club, from
Scientific Societies, &c., 1876.*

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BELFAST. Annual Report and Proceedings of the Belfast Naturalists' Field Club. 1874-5 and 1875-6. Series ii., Vol. i. Parts ii. and iii. 1876. 8vo.

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———— Memoirs of the Boston Natural History Society, Vol. ii., Part iv., No. ii. Revision of the North American Poriferæ, with Remarks upon foreign species, Part i. By Alphæus Hyatt, Boston, 1875. 4to.

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———— Ditto, No. iii. On Gymnandromorphism in the Lepidoptera: by A. S. Packard, Jr., M.D.—The Structure and Transformation of *Eumæus Atala*: by Samuel H. Scudder. 1875. 4to.

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CAMBRIDGE, MASS., U.S.A. Annual Report of the Trustees of the Museum of Comparative Zoology at Harvard College, in Cambridge, for 1876. 8vo. *The Museum.*

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———— Sars (George Ossian, Prof.) On some remarkable forms of Animal Life from the great deeps off the Norwegian Coast, ii. Researches on the Structure and Affinity of the Genus *Brisinga*. 1875. 4to. *Ibid.*

———— Sars (George Ossian, Prof.) Carcinologische Bidrag til Norges Fauna. 1. Monographi over de Ved Norges Kyster forekommende Mysider. Første Hefte, 1870. 4to. Andet Hefte, 1872. 4to. *Ibid.*

———— Obituary Memorial of Professor Christopher Hans- teen. 1863. 4to. 2 leaves. *Ibid.*

———— S. A. Sexe. Jættegryder og Gamle Strandlinier i fast Klippe (on Giant's Caldrons). 1874. 4to. *Ibid.*

———— J. W. Muller (Prof.) Transfusion und Plethora eine Physiologische Studie. 1875. 8vo. *Ibid.*

———— Siebke, H. Enumeratio Insectorum Norwegicorum Fasc. i. Catalogum Hemipterorum et Orthopterorum continens. 1874. 8vo. *Ibid.*

———— Ibid. Fasc. 2. Catalogum Coleopterorum continens. 1875. 8vo. *Ibid.*

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- GLASGOW. Proceedings of the Philosophical Society of Glasgow.
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gow, Vol. ii., Part ii. 1876. 8vo. *The Society.*
— Ditto, Vol. iii., Part i. 1876. 8vo. *Ibid.*
— Transactions of the Glasgow Society of Field
Naturalists. Part iii. 1875. 8vo. *The Society.*
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— Some of the Leading Industries of Glasgow and the
Clyde Valley, 1876, 8vo. *Local Committee of the British Asso-
ciation for the Advancement of Science.*
— Catalogue of the Western Scottish Fossils. 1876,
8vo. *From the same.*
— On the Fauna and Flora of the West of Scotland,
1876, 8vo. *From the same.*
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Society for 1875-6. 1876, 8vo. *The Society.*
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Society of Liverpool, 1875-6, No. xxx. 1876. *The Society.*
LONDON. Proceedings of the Geological Association, Vol. iv.,
Nos. 7, 8, 9. 1876, 8vo. *The Association.*
— Annual Report of Ditto. 1877, 8vo. *Ibid.*
— Journal of the Anthropological Institute of Great
Britain and Ireland, July, 1876, Vol. vi., No. 1; October,
1876, Vol. vi., No. 2; May, 1877, Vol. vi., No. 4.
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MANCHESTER. Proceedings of the Literary and Philosophical
Society of Manchester, Vol. xv. Session, 1875. 1876, 8vo.
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— Catalogue of the Books in the Catalogue of the
Manchester Literary and Philosophical Society, by Francis
Nicholson. 1875, 8vo. *Ibid.*
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and Durham, Vol. v., Part iii.
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OXFORD. Donations to the Bodleian Library, 1876. 1876, 8vo.
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- WASHINGTON, U.S.A. F. B. Meek. A Report on the Invertebrate Cretaceous and Tertiary Fossils of the Upper Missouri Country (Vol. ix. of the U. S. Geological Survey of the Territories), 1876, 4to.
From Dr. F. V. Hayden, United States Geologist.
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- A. S. Packard, jr., M.D. A Monograph of the Geometrid Moths or Phalænidae of the United States (Vol. x. of the U. S. Geological Survey of the Territories). 1876. 4to. *From the same.*
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- The Grotto Geyser of the Yellowstone National Park: Map and Illustration. 4to. *From the same.*
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- Annual Report of the Smithsonian Institution for 1875. 1876, 8vo. *From the Smithsonian Institution.*
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- U. S. Geological and Geographical Survey of Colorado, 1873. 1874, 8vo. *From the same.*
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- Preliminary Report of the U. S. Geological Survey of Montana, and portions of adjacent Territories. By Dr F. V. Hayden, U. S. Geologist. 1872, 8vo.
From Dr F. V. Hayden.
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- Sixth Annual Report of the U. S. Geological Survey of the Territories, embracing portions of Montana, Idaho, Wyoming, and Utah. By the same. 1873. 8vo.
From the same.
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- WELSHPOOL. Collections, Historical and Archæological, relating to Montgomeryshire and its Borders, issued by the Powysland Club, Vol. ix., Part 3; and Vol. x., Part i. London, 1876-7, 8vo.
From the Powysland Club.
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Places of Meeting for the Year 1877.

Gulane and Dirleton	..	Wednesday, May 16.
Acklington and Felton	..	„ June 27.
Coldstream and Swinton	..	„ July 25.
Chollerford	..	„ Aug. 29.
Lilliesleaf and Riddell	..	„ Sept. 26.
Berwick	..	„ Oct. 31.

Rain Fall at Glanton Pyke, Northumberland, in 1876,
communicated by FREDK. J. W. COLLINGWOOD, Esq.; and
at Lilburn Tower, Northumberland, communicated by
EDWARD J. COLLINGWOOD, Esq.

GLANTON PYKE.			LILBURN TOWER.		
		Inches.			Inches.
January	-	1·14'0.	January	-	1·015
February	-	3·50'5.	February	-	2·787
March	-	3·00'0.	March	-	2·957
April	-	5·50'0.	April	-	4·380
May	-	1·50'5.	May	-	1·173
June	-	2·50'5.	June	-	2·328
July	-	0·89'5.	July	-	0·810
August	-	2·5'5.	August	-	2·836
September	-	4·26'0.	September	-	3·491
October	-	2·13'0.	October	-	1·430
November	-	4·56'5.	November	-	3·344
December	-	9·93'0.	December	-	9·798
Total	-	40·99'0	Total	-	36·349
Rain Gauge—Diameter of Funnel, 8in.; Height of Top above Ground, 4 ft. 3½in.; above Sea Level, 517 ft.			Rain Gauge—Diameter of Funnel, 10in. square; Height of Top above Ground, 6ft.; above Sea Level, 300ft.		

General Statement.

THE INCOME AND EXPENDITURE have been:—

	£	s.	d.
Balance from last year	15	13	8½
Arrears received	23	8	0
Entrance Fees	13	10	0
Subscriptions	60	0	0
	£112 11 8½		

EXPENDITURE.

Printing	58	3	6
Expenses at Meetings	14	10	7
Postage and Carriage	15	12	6
Berwick Salmon Company	4	14	6
	93	9	1
Balance in hand	18	2	7
	£112 11 8½		

LIST OF NEW MEMBERS FOR 1876.

OMITTED.

Colonel James Grant Suttie, Maines House, Chirnside.
 Rev. H. E. Henderson, Alwinton, Morpeth.

ADMITTED SEPTEMBER 27, 1876.

Edward Ridley, 10, Carlton House Terrace, London.
 Rev. George P. Wilkinson, Harperley Park, Darlington.
 George Short, Stanhope Lodge, Norwood Road, London, S.E.
 Rev. W. W. Tulloch, B.D., Glasgow.
 Capt. Wm. Elliot Lockhart, younger, of Borthwickbrae, Hawick.
 Sir Edward Blackett, Bart., Matfen, Newcastle.
 Rev. Geo. Wm. Sprott, North Berwick.
 Capt. Neil Kennedy, 2, Manor Place, Edinburgh.
 John L. Crombie, M.D., North Berwick.
 Rev. Baptiste J. Holmes, St. Mary's Vicarage, Berwick.
 Rev. Paton J. Gloag, D.D., Galashiels.
 Henry S. Anderson, M.D., Selkirk.
 James Brown, Knowepark, Selkirk.
 George Rodger, Philipburn, Selkirk.
 Andrew Currie, Darnick, Melrose.
 William Lyall, Lit. and Phil. Society, Newcastle.
 William Topley, F.G.S., Alnwick.
 Hubert E. H. Jerningham, Longridge Towers, Berwick.
 Dr Alexander Crosbie, H.M.S. St. Vincent, Portsmouth.
 Robert Paton, Rosebank, Norham.
 Rev. Robert O. Bromfield, Sprouston, Kelso.
 Alexander Robertson, jun., Berwick.
 W. L. Miller, Union Bank, Berwick.
 Rev. W. Dobie, Ladykirk, Norham.
 John Clay, jun., Kerchesters, Kelso.
 Rev. W. H. Walter, Grove House, Gilesgate, Durham.
 James Hunter, Anton's Hill, Coldstream.
 George Brisbane Douglas, Springwood Park, Kelso.
 Rev. John B. Fletcher, Dunse.
 Thomson Jeffrey, 36, George Square, Edinburgh.
 Rev. G. H. Ainger, D.D., Whitton Tower, Rothbury, Morpeth.
 J. Bailey Langhorne, Outwood Hall, Wakefield, re-elected.
 Sir Molineux Nepean, Bart., Loder's Court, Bridport.
 William Brook Mortimer, Jesmond Dean, Newcastle.
 James Robertson, Rock Moor House, Alnwick.
 Alexander Scott, Hopetoun House, Queensferry.
 Robert Richardson Dees, Solicitor, Newcastle.
 John Ferguson, Dunse.
 Archibald Buchan Hepburn, Smeaton Hepburn, Prestonkirk.

CORRESPONDING MEMBER.

Robert Renton, Threeburnford, Lauder.

PROCEEDINGS

OF THE

BERWICKSHIRE NATURALISTS' CLUB.

*Address delivered to the Berwickshire Naturalists' Club, at
Berwick, October 29th, 1877. By CHARLES DOUGLAS,
M.D., Kelso, President.*

GENTLEMEN,

BEFORE, according to custom, as your retiring President, giving a resumé of our proceedings during the past year, allow me to thank you for having conferred that honour upon me at the last annual meeting. Aware as I am of my own shortcomings, I might have been tempted to decline the responsibility of office, had I not known that by the traditional though unwritten rule of the Club, obedience was imperative. The duties, I must say, have been light and pleasant, thanks to the labours of our permanent Staff, and the kind consideration of the members generally ; our meetings being invariably characterised by such an interchange of courtesy and good fellowship as is to be expected, when all are met with a common object, and that object such an attractive one, as the study of the works of the Great Author of Nature. After so long an existence as our Club has enjoyed, it is not to be expected that we should find much that is altogether new ; our revered first President, in his address when President for the second time in 1843, after eloquently

dwelling on the "beneficial influence of external nature over the constitution and mind of man, which this Club fosters and encourages" goes on to say, "it seems to me a matter of little importance whether we ever add a single item to the account of science." One of the main objects of our Club appears to be obtained by the impulse it gives to the study of the various subjects to which our attention is devoted. During the past year we have considerably extended our usual bounds—from Gullane to Chollerford—and not without both profit and pleasure. In this exceptionally cold and wet summer, so detrimental to the agricultural interests of this neighbourhood, and so destructive to our gardens, the sun has invariably shone upon our meetings; let us accept the omen, and say with our first member, "May the Club live for ever!"

In submitting the following report of our last year's meetings, I have to express to our Secretaries, and more particularly to Mr Hardy, my best thanks for valuable notes, as also to a portion of our local press.

Our last meeting in 1876 was held at Dunse, on the 27th September. By the kind invitation of Mr Campbell Swinton, of Kimmerghame, our President, we met at breakfast at his beautiful mansion on the banks of the Blackadder, some three miles distant from Dunse, where about forty members were most hospitably and sumptuously entertained, the table being graced by the presence of the ladies of the house. During the day the following members were present—Mr A. C. Swinton, of Kimmerghame, President; Dr F. Douglas and Mr J. Hardy, Secretaries; Mr R. Middlemas, Treasurer; Major the Hon. R. Baillie Hamilton, M.P.; Sir George H. S. Douglas, Bart., M.P.; Sir Walter Elliot, K.S.I.; Mr Milne Home, of Milne Graden; Lieut.-Col. Crossman, R.E.; Capt. Forbes, R.N.; Capt. Elliott Lockhart; Revs. George Selby Thomson, John F. Bigge, J. E. Elliot, E. Rutter, P. Mackerron, D. Paul, J. B. Fletcher, J. M. Robertson; Drs Charles Douglas, Charles Stuart, J. B. Heuston; Messrs W. B. Boyd, John Clay, George Muirhead, Francis Brisbane Douglas, W.

T. Hindmarsh, Thomas Hownam, Adam Deas, Wm. Stevenson, William Currie, James Tait, J. B. Kerr, Thomas Allan, C. B. P. Bosanquet, William Topley, F.G.S., James Purvis, Charles Watson, A. H. Evans, Robert Paton, Thomson Jeffrey, Robert Douglas, James Wood, C. M. Wilson, Wm. Elliot, Robert Renton, John Elliot.

After breakfast, the new members proposed during the year were elected—39 in number—and the places of meeting fixed for next year, as follows:—Gullane Links, May 16th; Acklington and Felton, June 27th; Coldstream and Swinton, July 25th; Chollerford, August 29th; Lilliesleaf and Riddell, September 26th; and Berwick, October 31st.

The following articles were exhibited—a bronze Celt, found on the Kimmerghame estate; a large bronze Celt, brought from Threeburnford, by Mr Renton, along with a perfect stone Celt (since engraved in the Club's Proceedings), and another broken stone Celt; a Silver Groat of Henry IV., coined at Calais. An example of this coin is engraved in Leake's "Account of English Money," Plate II., No. 22. It is inscribed on the obverse *Henric Di Gra Rex Angl & Franc*, on the reverse *Posui Deum Adiutorem Meum*, and on an inner circle *Villa Calisie*; it was found near Belses, Roxburghshire. Mr Renton also exhibited from the farm of Over Howden, a stalk of barley with a double ear; it divided into two heads at the fourth grain, separating at the axil of the grain without any foot stalk; the heads after the fork were nearly of equal length; it had contained 22 grains, and was of the Chevalier variety. Mr A. H. Evans brought a specimen of the Clifden Nonpareil Moth, taken at Scremerston, 4th September, 1876.

The extensive library at Kimmerghame was next viewed with much interest, it contains many rare volumes, especially Club and privately printed books. In the hall is a pair of large Red Deer antlers, of five tines each, the tops being broken off. These were dug from a bog on the estate, where the remains of the skull of a Beaver were also obtained. I may mention that there is a similar skull in the Kelso

Museum, got from Linton Loch, in 1843, from which also many antlers of Red Deer have been taken, a magnificent pair of which, carrying nine and ten tines respectively, were preserved by the late Mr Purves, the tenant there ; these are now in possession of Mr Elliot, of Clifton Park.

The party then, under the guidance of the President, spent two most delightful hours in strolling through the well kept gardens and grounds, from which splendid views of the surrounding scenery were obtained, extending from the Cheviots to the Lammermoors. Before leaving Kimmerghame, Mr Milne Home exhibited the much worn banner carried at Flodden by the Homes of Wedderburn ; on which memorable occasion, Sir David Home, of Wedderburn, and his son, George, were among the slain. The banner is of silk with a white St. Andrew's Cross upon a green ground.

Wedderburn Castle was next visited, a large imposing modern building embosomed in dark woods ; close to the Castle are some very fine old yew trees ; over its front are the arms of the Homes of Wedderburn, with the mottoes "Remember" and "True to the end." An old stone with an engraving of arms from the old house, is let into the wall in the court at the back of the Castle. It shews a monogram of Home and Sinclair, and bears the inscription :—

GEORGES HUM DNS
DE VEDDERBURN
ME FÉCIT FIERI.

On leaving Wedderburn the members proceeded to Dunse, a distance of about two miles, where all assembled to dinner at 3 ; the hour being forestalled a little, from the necessity of some of the party leaving by train at an inconveniently early hour. After a most excellent dinner, the following curious letters and papers were shewn by Mr Charles Watson, Dunse :—

1. Charter by King James IV. in favour of George Home, of Ayton, erecting Dunse into a Burgh of Barony, dated 24th February, 1489, with translation (printed in Club's Proceedings).

2. Instrument of Sasine in favour of William and James Raff, Chirnside, proceeding on a Charter granted by George Lylle, of Stanypath. The Instrument is dated 31st May, 1597. The notary who signs the Instrument is the notorious George Sprott, of Eyemouth, who was executed on the 12th August, 1608, for being concerned with Robert Logan, of Restalrig, in the Gowrie conspiracy in 1600.

3. Feu Charter by Sir Patrick Home of Ayton, and E. Edmonstoune, his spouse, in favour of William Bouston, in Dunse, and Janet Sinclair, his spouse, dated 28th April and 13th May, 1609. This William Bouston was the grand-uncle of the celebrated Mr Thomas Boston, author of the "Fourfold State," &c.

4. Letters of cursing—Pope Clement VII., against David Lord Lindsay, dated 6th December, 1527.

Several other papers were laid before the meeting, which have since appeared in the Proceedings. An article of interest to the Club was on the table, reprinted from the Transactions of the Royal Society of Edinburgh, Vol. xxvii., entitled "Notice of High Water Marks on the banks of the Tweed and some of its Tributaries, and also the Drift Deposits in the Valley of the Tweed," by David Milne Home, of Wedderburn, LL.D., &c.

The Rev. A. H. Ritchie sent some curious extracts from the Innerwick Session Records, of date 1608.

The retiring President then read a most admirable address, listened to throughout with much interest.

Dr Charles Douglas was elected President for 1877.

The first meeting of this year was held at Gullane, on the 16th May, at which were present Dr Charles Douglas, President; Dr F. Douglas and Mr Hardy, Secretaries; Professor Balfour; Revs. J. F. Bigge, B. S. Wilson, G. W. Sprott; Capt. Forbes, R.N.; Capt. Macpherson; Drs Alex. Dewar, J. Robson Scott, J. L. Crombie; Messrs C. B. P. Bosanquet, W. B. Boyd, Sholto Douglas, and Wm. Shaw. The comparatively small attendance was no doubt partly owing to the place of meeting being somewhat remote, but perhaps more to the

unpropitious state of the weather previously — cold and raw with cutting E. and N.E. winds, making the season an unusually late one, vegetation being quite three weeks behind its ordinary time.

Those who did attend were rewarded by having a bright and lovely day for their walk, with genial soft W. wind, all the more to be enjoyed in the retrospect, from the succeeding day proving as wet and disagreeable as the preceding one had been delightful. Before breakfast, there being some little time to spare, those of the party who had arrived, strayed out on the links, extending from the Golf Hotel, our place of rendezvous, to the sea. The plants, like those generally found in like habitats, were small and stunted in their growth, including amongst others in flower *Myosotis collina*, *Draba verna*, *Viola hirta* and *canina*, and *Saxifraga tri-dactylitis*. The Cuckoo, male and female, were not only heard but seen on the higher part of the links overhanging the sea, where were also seen a Pied Wagtail and a few Wheatears, which breed in the rabbit-warrens; Curlews and Lapwings abound on the shores and links; Redshanks also were heard; and no where does the Lark sing more cheerfully than over this waste; from here the line of coast is traceable from Aberlady to Leith, and beyond lie the dusky islets on the Frith and the opposite shores of Fife, with the Ochils in the background.

After breakfast, the Club, under the guidance of Mr Stevens, our landlord, a good local antiquary, proceeded towards Dirleton Castle, about $2\frac{1}{2}$ miles N.E. of Gullane. Passing modern Muirfield the road skirts a hill on which there is a quarry in constant use for building stones and road metal; it produces a pale-coloured beautiful Porphyry, variegated with oval and angular grey and white patches; from it also were drawn those stones ornamented with deep red bands, streaks, and dots of compact felspar, so abundant on the wall tops. On the south side of the road near this stood College Stead, otherwise Quarrel-edge-head (*i.e.* Quarry-edge). This belonged to the Provostry of Dirleton,

and was most likely the site of the Collegiate Church of Dirleton, founded by Sir Walter Halyburton. in 1444.

Dirleton Castle in its ruinous condition is still, as Lord Hailes called it, "a mighty fabric;" its exterior is massive but plain. There is a conspicuous Norman arch on the eastern side. The interior has been very commodious, the number of vaulted, domed, and other chambers being great; wells, a huge oven, cellars, and turnpike stairs make up the inventory. In an open oblong apartment on the east is a sculptured tomb, but the arms have been effaced from the shield, and no one can conjecture to whom it may have belonged. Some of the mason's marks are yet uneffaced at the eastern gate, where the portcullis barred the passage. It may have been at this "Yett of Dirltoun" that in November, 1600, John Blinsell, Islay Herald, exercised his functions for form's sake, in summoning the defunct William, Earl of Gowrie, to appear before the King's Council for treason against King James. The Castle has not been inhabited since 1650, when Monk and Lambert, who had reduced to surrender a band of mosstroopers who had seized it, dismantled it. The only other siege it is known to have undergone was in 1298, during the invasion of Scotland by Edward I., who deputed the duty of besieging it to Anthony de Beck, Bishop of Durham. He compelled the garrison to surrender, after several days' assault, the opportune arrival of provisions by sea having invigorated his men, who had been reduced to eating beans and peas picked up in the fields, on which provender they had been unable to make good their attack.

Dirleton has belonged to the De Vausés, the Haliburtons, the Ruthvens (Earls of Gowrie), the Erskines (Earls of Kellie), the Maxwells of Innerwick (now represented by the Marquis of Salisbury), and latterly by the descendants of the Nisbet family. At present the Castle, grounds, and garden are preserved with the utmost care; on the northern garden wall is a Wisteria, whose immense branches are trained along its southern aspect to the length of about 200 feet. A

large old Pear tree, a Black Auchan, also attracted attention, contrasting with the artistically arranged modern flower garden in which it stands. This gave promise of much future beauty, but as yet the putting in of bedding-out plants was not in an advanced state.

The party now recrossed the village green, which, like everything about, was kept in beautiful order, to the park and gardens of Archerfield; which, in 1639, was possessed by Alexander Forrest, son of Patrick Forrest, of Archerfield. Their descendant was a Sir George Forrest. Before 1669, the place was in possession of Sir John Nisbet, King's Advocate, and a Senator of the College of Justice. The house is a spacious mansion in the style of the 18th century, and is now one of the residences of the Right Hon. Christopher (since dead) and Lady Mary Nisbet Hamilton. After walking through the gardens the members proceeded to the links by the site of the Castle and village of Elbottle, of which there are now few if any vestiges. The links here were covered with ground ivy. The party now returned to Gullane, seeing on the way a number of race-horses at exercise; Gullane links being a noted training place, as well as the resort of the votaries of the Royal Game of Golf.

The Church, dedicated to St. Andrew, was now visited, a plain oblong building, with a northern and eastern aisle, the former entered by an unornamented splay arch, the latter by a Norman arch with a chevron ornament. The small windows and doors are square headed. There are some lancet openings concealed by the ivy. The northern aisle is the burying place of the Congaltons, an ancient family once connected with the parish. It is unroofed and grown up with wild shrubs (cut down since the visit of the Club). The tombstones in the eastern aisle are modern, belonging to a family of the name of Yule, who possessed Gibslees, a small estate near North Berwick; one of them that of John Yule, M.D., F.R.S.E., drew the lively sympathies of the company from his being a naturalist ("*Herbarum ac Rerum Naturalium scientia maxime imbutus*."). In the churchyard one of the

oldest legible stones is a *Throuch* bearing a Calvary Cross ; round the outer border is inscribed " HERE LYETH ANE HONEST MAN CALLIT JOHN THOMSON, PORTIONER IN GULANE, WHO DEPARTED THIS LIFE, 1578." There are also tombs of the Heriots, relatives of George Heriot, founder of the hospital bearing his name.

A brief visit was now paid to Saltcoats, an extensive old manorial house in ruins ; on the west front the Norman arch of Dirleton is repeated. The base and the top of the garden walls are fringed with flowering *Cheiranthus Cheiri*, *Parietaria officinalis*, *Sempervivum tectorum*, and *Saxifraga tridactylitis*. Chalmers in his *Caledonia* says, " near Golin, at the mouth of the West Peffer, there was of old a salt work which imparted to the place the significant name of Saltcoats." The late possessor, Lady Ruthven, was the representative of the ancient family of Levingtouns de Saltcoats, through the marriage of the heiress of that line to John Hamilton, eldest son of Hamilton of Pencaitland. It is now portion of the Luffness estate.

After dinner, Mr Hardy read a paper from Mr Gray, " On the Birds of the Islands of the Firth of Forth." Dr Robson Scott exhibited some very rude flint implements, found in gravel at the bottom of a newly opened drain at Belford, Yetholm. The Rev. James Farquharson sent some remarks on the lateness of the season, as shown by the foliation of the trees at Selkirk. Professor Balfour observed that he had had the greatest difficulty in procuring specimens of plants to illustrate his lectures. Dr J. A. Murray, of Hendon, Middlesex, on behalf of the English Dialect Society, made a request for members to aid him by sending him the titles and dates of local publications in the Scottish dialect, for a bibliographical work to be issued by that Society. The following were proposed for membership—Mr James Lumsden, Jun., F.Z.S., Arden House, Dumbartonshire ; Mr James Tait, Eglington ; and Isaac Bayley Balfour, Sc. Dr., Edinburgh.

Our next meeting was at Acklington and Felton, on the

27th June. After partaking of the many good things provided for breakfast at Acklington Rectory, by the kindness of the Rev. George Selby Thomson, a former President of the Club, a large party, under the guidance of Mr Middleton Dand, of Hauxley Hall, proceeded through the neat and clean looking village to a field which Mr Dand supposes to have been the site of an old Roman camp. The names of "Street Head," "Chester House," and others, may indicate that there had been occupation of this neighbourhood by the Romans, but no reliable remains of earthworks could be detected ; certainly the locality seemed well suited for a camp, as it commanded an extensive view in all directions for such a champaign country. In the same field is a whinstone dyke running E. to W., which has been utilised for road making purposes. It is singular, as there is no other trap dyke in the vicinity. The party then proceeded in the direction of the Coquet, the larger number passing through the grounds of Morwick Hall, the residence of Mr James Dand. The old trees, particularly a fine tulip tree, a large acacia, and numbers of fine yews attracted much notice ; in the garden is a vault belonging to the Grey family, the former proprietors, in which the mother of the late Sir John Grey, who commanded a division in the Sutlej campaign, was interred in 1796, as indicated by a plain tombstone at the end of a fine over-arching avenue of yew trees. The vault also contains an old monument, brought, it is said, from Warkworth, surmounted by the emblem of a double-handed sword.

A move was now made onwards to Morwick Mill, where the party joined some of the members, who had gone there by a more direct route to inspect the incised figures on rocks overhanging the Coquet, a short way below the mill, which had recently been discovered by Mr Middleton Dand. These are different from any of those so well and elaborately described by our late Secretary, Mr Tate, and others, as occurring on rocks at Old Bewick, Doddington, Routing Linn, and other places in Northumberland. Those already recorded occur generally on the surface of sandstone rocks,

cropping up on hills or other high ground ; these are on the face of a sandstone cliff rising perpendicularly from the bed of the Coquet, a very short way above the level of the sea. The most typical of the former are composed of concentric circles with a radial groove passing from the centre to the circumference, or beyond it. In these now under observation, about six in number, there is no radial groove, but the figure in the most distinct is of a spiral form somewhat resembling those figured by Mr Tate in his paper, published in our Transactions for 1864, from sketches by Capt. Carr, R.E., as occurring on rock temples at Malta ; with this remarkable difference, however, that the latter were in relief, those on the Coquet, like all others in Northumberland, incised. The first inscription seen by Mr Dand from a boat on the river is of a different character from any of the others, the outer circle being composed of a number of dots or pits, at perhaps two inches distance from each other, in this, somewhat resembling an inscription discovered by Mr Tate, at Jedburgh, but not *in situ*, and shown in Plate XI., Fig. 6 of the illustrations to his paper, above alluded to. The entire diameter appeared from the boat, from which the inspection was made by small detachments of our party at a time, to be about a foot, and was apparently the largest observed ; it faced the river ; others were on a different aspect of the rock, facing nearly at right angles to the one first observed. One of our members noticed that two of the spiral figures, close to each other, were in fact continuous, the line being carried from one to the other. The inscriptions are from about ten to fifteen feet above the present level of the river, but at the remote period at which they were doubtless executed the channel of the river would be at a much higher elevation. It is to be hoped that a minute and accurate account of these inscriptions with engravings, may be supplied for our Proceedings, by some member having the means of closer observation than we had. Some of the more adventurous of our party got a nearer view than those in the boat, by scrambling along the face of the rock, not with-

out danger to all concerned ; one energetic member displaced with his feet a block of the sandstone rock, which fell with a mighty splash into the river, the boat at the time fortunately being some yards off. These rocks were covered with impressions of *Lepidodendrons*.

The company now proceeded up the river, crossing in boats, kindly provided by Mr Dand and Mr Tate, and had a delightful walk up the banks, which were beautifully wooded and rich with blossoms, among the gayest of which were the *Lychnis dioica* and *Geranium sylvaticum* in great profusion. There were besides noticed among other plants, *Veronica montana*, *Sanicula Europea*, *Lysimachia nemorum*, *Campanula latifolia*, *Equisetum Telmateia*, *Carex pendula*, *Betonica officinalis*, *Asperula odorata*, *Carex axillaris*, *Habenaria albida*, *Anagallis arvensis*, &c. On arriving at Barnhill, beautifully situated on the banks of the river, of a reach of which it commands a fine view, we were most hospitably entertained by Mr Tate, after which we again descended to the banks of the Coquet to inspect the ruins of the chapel of Brainshaugh. I am indebted to the Rev. G. Selby Thomson for the following notice of this chapel, from the pen of Mr Seymour Bell, with some additions by Mr Thomson.

The following notes respecting Brainshaugh Chapel and Guyzance are taken from a communication made to a local newspaper in 1865, by C. Seymour Bell, Esq., of Carlton, near Darlington, a member of our Club. A survey of the Percy estates was made by Mr Thomas Clarkson, in 1567, thirty years after the suppression of the Monastery of Alnwick, and consequent secularization of its estates, who expressly states, that the chapel of Brainshaugh was the parish church of Guyzance, and writes thus respecting

“Brainshawghe cum suis pertinenciis.”

“To the westward of the town of Guysnes is situate one chapell with certaine other good buyldyngs unto the said chapell appertaining called Braynshawgh, which chapell was foundit by ———, then lord of Shilbottell, Guysans, and other townes

which afterwarde was the inheritance of the Baron Hilton, by marriadge of the dowghter and soylle heire of the forsaide ———, then lord of Shilbottell and other the premises. It was first a nonrye, and after changes* at the last brought to the master and his felowe who then was accomptant to the monasterye of Alnewyke of all the yssues and profits which yerely did encrease above the fyndynge of the sayd mayster and felowe and their famylle. ———, then lord of Aclington, did graunte that parcell of grounde wherein the scite of the sayd chapell and other buyldyngs standith to the abbott and convent of the said lait dissolved monasterye of Alnewyk for the same was parcel of Aclington in the old Ynglish tonge called Brainshawge; all the other land meadowes and pastures thereunto adjoyning was gevyn by the said ———, lord of Shilbottle to the mayntenance of the said religious personnes in puram elemosynam as by the register book of the same at length is declared with all other parcells of lande apperteyning to the said howse of Brainshawghe.”

“The chapel ruins, from the best information now to be obtained, have been in the present dilapidated state, without material change, for the last sixty years. Previous to that period, from the division of the tithes among several lay impropiators, the ownership of the graveyard and site of the ruin was undefined, and consequently the materials lay at the mercy of those around; great quantities of stone were then taken away for buildings at Brainshaugh,” &c. “The outer fence was a broken down wall, perhaps as old as the church, so dilapidated that the cattle from the surrounding pasture could graze over the graveyard. The present enclosure wall was built by the late John Tate, Esq., of Bank House, after he had acquired the sole property of the area.” The district had been treated as the “Extra Parochial Chapelry of Brainshaugh,” as shewn by County Records, more than two hundred years. John Tate, Esq., of Barnhill, is now the sole tithe owner, and proprietor of the freehold of the ruin and graveyard.

“The late Mr Tate remembered service being performed frequently under the shade of a large thorn tree, which still stands outside of the gate. When the old hall at Gloster Hill was burnt down on Sunday, January 7th, 1759, his parents were at the ser-

[* “Chanones.”—*Arch. Æliana*.]

vice, and were sent for on account of the fire. I cannot tell from whence the officiating minister came, or how he was remunerated for his trouble."

"The burial ground is open to the inhabitants of Brainshaugh and Guyzance. A register of burials was commenced by the late Mr Tate, but it is said that interments have been registered at Edlingham, Shilbottle, Felton, and Warkworth, as suited the convenience of the officiating clergyman. Mr Tate's family burial place is within the chancel, of which the east end has been an apse," as shewn by the old foundations. "The popular tradition, so frequently appertaining to similar ruins, exists in the neighbourhood, that the Priory of Brainshaugh was an appendage to Brenckburne Priory, and that a subterranean passage existed between the two places. All this is, of course, mere fable, as the chapel undoubtedly belonged to Alnwick, but it is curious as shewing, that these old tales, however confused, had their origin in actual local circumstances, to note that Brenckburn had possessions in Guyzance and Barnhill. May not the subterranean passage have been a secret footpath through the dense wood, which, in early times, filled the Vale of the Coquet? The existing walls of the ruin are faced with dressed stones, 'blocked in course,' but very irregular, the core of the walls being filled with round stones from the river, and coarse lime. They are about thirty inches thick. In the nave, about half the height of the walls, there are holes as if there had been beams let in to carry the floor of an upper chamber. The piscina, which has two basins, has the arch of its recess formed of one large stone, quite out of proportion to the 'blockers' of varied size and thickness around."*

In order to prevent further decay and destruction, a few years ago, Mr Tate had the walls of the old church pointed with cement, and at the same time a large accumulation of rubbish, stones, and *debris* from the building was removed from the interior of the church, when the beautiful base of one of the old columns was laid bare. Some carved stones were also found and preserved, and the graveyard generally put in good order.

When Acklington was constituted a separate parish in 1859,

[* See Mr Bell's paper *in extenso*, in "Archæologia Æliana," vol. iv, N.S., pp. 1-5; also a paper, full of research, by Mr Longstaffe, on the Church of Guyzance, and its benefactors, in the same work, vol. iv., pp. 129-145. —J. H.]

and a handsome church built by Algernon, Duke of Northumberland, the Extra Parochial Chapelry of Brainshaugh was annexed to it, and the service for the interment of the dead has, since that time, been performed by the Rector of Acklington.

From Brainshaugh, the party went on to Felton, the greater number still following the winding banks of the river; the gardens, grounds, and private chapel at Felton Park were visited by the kind permission of Mr Riddell, the proprietor, as well as the old church, after which a party of twenty-six assembled at the Northumberland Arms, where an excellent dinner was provided. There were no papers read. A small glazed Roman lamp, with projecting lip, was shown by Mr Hindmarsh; it was found some two feet below the surface near Lucker. A hearty vote of thanks was passed to the Rev. G. S. Thomson and Mr M. Dand, for the kind assistance severally rendered by them to the Club during the day.

The following members were present—Dr C. Douglas, President; Dr F. Douglas, Secretary; Mr R. Middlemas, Treasurer; Revs. G. P. McDouall, Geo. Selby Thomson, J. E. Elliot, D. Paul, P. McKerron, W. J. Meggison; Dr Paxton; Messrs C. B. P. Bosanquet, Thomas Tate, W. B. Boyd, J. B. Kerr, C. M. Wilson, Edward Allen, T. Clutterbuck, M. H. Dand, A. H. Evans, James Tate, James Heatley, W. T. Hindmarsh, T. Allan, J. Nicholson, and Captain Forbes, R.N., and as guests, Revs. J. Farmer and J. Dand and Messrs Donkin and J. Marshall. The following were proposed for membership—Mr R. Mason, Secretary to the Natural History Society of Glasgow; Mr Alex. Rutherford Turnbull, Hawick; Mr G. H. Stevens, Gullane; Mr Charles F. McCabe, Thirstone House, Felton; Mr James Aitcheson, Alnwick; Dr George Hogarth Turnbull, Kelso; Mr John J. Horsley, Alnwick; Rev. Charles Green, Embleton; Mr Thomas Charles Hindmarsh, Barrister-at-Law, Essex Court, Temple, London.

On the 25th July, the Club met at Coldstream, when there were present—the President, the Secretaries, Colonel Briggs, Capt. Forbes, R.N.; Drs Brown and Dewar; Revs.

J. F. Bigge, P. G. McDouall, J. S. Green, G. P. Wilkinson, E. A. Wilkinson, R. Hopper Williamson, M. H. Graham, P. Mearns, Robert Paul, J. Hill Scott, J. M. Robertson, Wm. Dobie; Messrs M. Culley, W. Cunningham, J. Smail, G. R. Smail, W. H. Johnson, T. Allan, W. Hilson, J. B. Kerr, R. H. Falconer, W. Richardson, and T. H. Gibb.

The principal object of this meeting was to visit Simprin, the birth place of the distinguished founder of our Club, and Swinton, the residence in their earlier years of his able co-adjutors, the three Bairds, whose father was minister of the parish.

After breakfast, the Rev. P. Mearns read a paper on the objects most worthy of interest in and near Coldstream. The Rev. G. P. Wilkinson, of Harperley Park, shewed a beautiful series of silver coins and medals, illustrative of our national history. Three of these were large medals of James and Henry Stuart—one groat of Edward III. had been found on his estate near Darlington. The Rev. J. F. Bigge gave information as to the introduction to the river Pont, in Northumberland, of the American brook trout, *Salmo fontinalis* (Mitchell). This, one of the most beautiful of fresh water fishes, is related to the char, and as usually seen in the lakes about Halifax, N.S., is in length from 10 to 18 inches, and weighs from $\frac{1}{2}$ to 2lbs; it frequents still waters, and is more a lake than a river fish, but has a predilection for brackish-tidal waters.

On leaving our inn, the party divided, some of the members going to inspect the grounds of Hirsell and Lees, which have frequently been visited before by the Club; the others drove to Swinton, passing first on their way Lennel, once the residence of Patrick Brydone, F.R.S., author of "A Tour through Sicily and Malta," and a zealous electrician. His tombstone, in Lennel churchyard, simply records the date of his birth and decease.

"PATRICK BRYDONE, Esq., F.R.S.
NAT. 1736.
OB. 1818."

His father was parish minister of Coldingham. Simprin was next reached, and the ruins of the church, once the scene of the labours of the celebrated Boston, were examined ; the gateway is still standing through which Boston passed from the churchyard to the manse garden, and the game-keeper's cottage, close by, contains that famous divine's study door, which is of Memel fir and panelled. The party then drove on to Swinton, and inspected the old church and the many old tombstones, erected to the memory of members of the family of Swinton of Swinton, and others. Conspicuous among the former is an old tomb, with a nude effigy, bearing the inscription

“ HIC JACET
ALANUS SWINTONUS
MILES DE EODEM.”

Above him are rude figures of pigs and a sow. This is said to be the Alan de Swinton, who, in the end of the 12th century, slew a devastating wild sow, whence the name Swinton. There is an old family of the name of Swine in the village, the funeral of one of its members had just taken place before our arrival.

On the western wall in the interior of the church is a marble tablet, possessing much interest for the members of the Club ; it bears the following inscription :—

“ Sacred to the Memory of
WILLIAM BAIRD, M.D., F.R.S., F.L.S.,
Youngest son of the late Rev. JAMES BAIRD,
Minister of this Parish.

He was born at Eccles, in Berwickshire, 11th Jan., 1803,
And died at his residence in Burlington Road,
Westbourne Park, London, 27th Jan., 1872.

His remains are interred in Kensal Green Cemetery.

He was educated in Edinburgh, was ten years
Surgeon in the H.E.I.C.S., and upwards of 30 years

Curator of the Conchological Collection
In the British Museum.

While greatly esteemed for his extensive
Scientific knowledge and Literary attainments,

By his contemporaries, his exemplary Life,
His kind and amiable disposition,
His gentleness, meekness, and benevolence,
Endeared him to all classes.
He was a zealous and distinguished Naturalist,
An assiduous and accomplished Scholar,
A sincere friend, a practical Christian,
And a loving and much loved Husband.
This slight tribute of affection to his
Many virtues, is erected by his sorrowing widow.”
“I know that my Redeemer liveth.”

After inspecting the well-kept manse garden, from which a fine view of the Merse was obtained, the party proceeded to Swinton House, where they were courteously shown what was interesting about the grounds by Mr Alan Swinton. The mansion house is modern, two former houses having been burnt down, the last in August, 1792. There are some fine old Yew trees, a large Acacia (then in blossom) said to be the second largest in Berwickshire, a very fine old Larch and many well-grown Oaks, Beeches, and Elms, but none of great age. Two large globes of sandstone were pointed out, surmounting two pillars in the garden; they had been dug out of the Leet, and are similar to those at Norham Castle, which are regarded as having been the ammunition provided for “Mons Meg.”

On leaving Swinton, the party drove back to Coldstream, passing through the beautiful grounds of the Hirsell. After dinner, a letter was read from Dr Turnbull, Coldstream, offering to the Club an engraving of the only known portrait of Patrick Brydone, which was cordially accepted, with thanks to the donor. Two silver Roman coins the property of Mr William Cunningham, were exhibited; they were found on the farm of Bowmont Hill, in Kirknewton parish; the oldest was one of Hadrian in his third Consulate, its date about A.D. 120, the other was one of Faustina the younger, wife of Marcus Aurelius Antoninus; it is inscribed “Diva Faustina Augusta,” and must have been struck after her death which took place A.D. 175.

The Rev. Robert Paul shewed the old hand-bell of Lennel, which had been rung for funerals and other purposes, and which was afterwards used in Coldstream, it is inscribed—

“THIS IS LENDON HAND BEL.”

He also exhibited several coins, the most valuable being a gold noble, in fine preservation, of Edward III., and a gold St. Andrew of Robert II., both found in 1836, while repairing the crypt of Glasgow Cathedral; also a Sacramental token of the parish of Oxnam, lettered “Ox. 1756,” the period when the Rev. Thomas Boston, Jun., was minister there; and also a letter of Thomas Campbell, the poet, to the Campbell Club, Glasgow, dated 6th December, 1830, accepting the Lord Rectorship of Glasgow University.

A paper was read from Mr Bolam, of Berwick, on the growth of several ornamental trees at Linden House, and the occurrence there of the Pied Flycatcher for the second time; and Mr Hardy mentioned that he had recently met with broken bones (broken to extract the marrow) mixed with numerous decayed periwinkle and limpet shells at the extremity of a dark sea-side cavern near Siccar Point, which coincide in aspect with others obtained within the precincts of a British camp at no great distance inland; it was hence surmised that this cave had been inhabited in early ages.

The following were proposed for membership—Revs. R. Hopper Williamson, Whickham, and R. F. Proudfoot, Fogo, and Messrs M. Culley, Jun., Coupland Castle; W. H. Johnson, Ramrig; Alan Swinton, Swinton House; G. T. Lebour, F.G.S., Lecturer on Geological Surveying in the Newcastle College of Science; and Robert L. Peploe, of the Commercial Bank of Scotland, Edinburgh.

The meeting at Chollerford, on the 29th August, had been much looked forward to, and notwithstanding distance, difficulty in getting accommodation in the neighbourhood, and the generally unpropitious state of the weather, there were large numbers of members at breakfast, who were well rewarded for their zeal by a lovely day for exploring the wonderful remains of Roman art and skill to be seen in the

neighbourhood. There were present—Dr C. Douglas, President ; Dr F. Douglas and Mr Hardy, Secretaries ; Mr Middlemas, Treasurer ; the Revs. J. Collingwood Bruce, LL.D., John F. Bigge, Thomas Rogers, Walker Featherstonhaugh, R. Hopper Williamson, Canon T. W. Wilkinson, E. A. Wilkinson, F. Kirsopp, — Tarber, J. A. Sharrock, A. Davidson, J. E. Elliot ; Col. Briggs, Capt. Macpherson ; Drs Paxton and Robert Wilson ; Messrs F. J. W. Collingwood, G. P. Hughes, John B. Boyd, W. B. Boyd, John Turnbull, William Currie, C. B. P. Bosanquet, J. B. Kerr, C. M. Wilson, James Wood, Robert Brown, Adam Robertson, John J. Horsley, E. Allen, James Heatley, Henry H. Blair, A. H. Evans, John Clay, Thomas Allan, J. Scott Dudgeon, Thomas Henderson, Douglas Simpson, John Thomson, Thomas Arkle, Robert Reed, William Kinnear, T. Turnbull, T. P. Dodds, Charles Erskine, H. Dand, W. Robson, T. H. Gibb, and David Watson.

There were proposed for membership at this meeting—Rev. James A. Sharrock, St. Nicholas' Church, Newcastle ; Mr G. E. Watson, Alnwick ; Mr Stuart Macaskie, Brick Court Temple, London ; Rev. Walker Featherstonhaugh, Edmondbyers, County Durham ; Mr L. Calvert Chrisp, Hawkhill ; Mr Charles Woods, Holleyn Hall, Wylam ; Mr George H. Thompson, Alnwick ; and the Rev. John Dawson, Mackerston.

After disposing of a comfortable breakfast, with appetites made keen by an early start from many different quarters, the Club, under the able leadership of Dr Collingwood Bruce, proceeded down the left bank of the North Tyne for nearly a mile, to the old bridge which united the Roman Wall on either side of the river. The Abutment, discovered by Mr Coulson, had been completely cleared from its superincumbent and surrounding earth, by the liberality of Mr Clayton, of Chesters, the proprietor of the Stations of *Cilurnum* (just opposite, and in front of Chesters House), *Procolitia*, *Borcovicus*, and *Vindolana*, who during a long life, by his skilful excavations, conducted at great expense, has done so much to illustrate the history of the Roman Wall and its adjuncts.

Having collected his somewhat scattered forces, Dr Bruce gave a most lucid description of what lay before us. The structure was conspicuous for its solidity, and perfect state of preservation ; the large blocks of stone remaining for the most part *in situ* in the courses in which they had been laid. The upper stones had been joined together by bands of iron ; the grooves in which these had rested were quite obvious, and they had been secured by lead run into the stone hollowed for that purpose ; some of the pieces of lead are still preserved.

The abutment presents a frontage of 22 feet to the river. In its centre is a piece of masonry differing from all the rest ; it is surmised that it may be the remains of an earlier bridge, probably erected by Agricola. The present structure is supposed to have been the work of Hadrian as well as Severus. Its exact age is not known ; an inscription was found on one stone, the greater part of which is unfortunately worn away ; but enough remains to shew that it was built by Ælius Longinus, a Prefect of Cavalry. Several curiously shaped stones were noticed and commented on. One, like an elongated barrel-shaped nave of a wheel, with sockets round its centre, attracted much attention. It might have been some thirty inches in length, by a foot or more in diameter at its widest part. Dr Bruce stated, that many surmises had been made as to its use, but no satisfactory solution had been arrived at. It was thought by some to have been used to pulverise the mortar for building the bridge ; but there was no appearance of its having been worn by any such process. It had also been suggested, that it might have in some way helped to move the wooden platform which had extended from the abutment to the nearest pier of the bridge. This, like others, standing in the bed of the river and visible when the water is low, could not now be seen from its flooded state. A short way behind the river front of the abutment are the remains of a small fort ; no doubt at one time occupied by the men told off to guard the bridge ; from each side of this, is a covered way running in the direction of the river, the uses of which are still matter of doubt.

It had been intended that the party should have crossed the river here in boats to the Station of Cilurnum, on the opposite bank, but in consequence of the swollen state of the river, our steps had to be retraced to Chollerford bridge; crossing which, we walked down the right bank of the river to Cilurnum, a great part of which has been excavated under the directions of Mr Clayton. The whole area comprised within the walls of the Station extends to $5\frac{1}{4}$ acres. Outside the Station the gateways were first examined, that next the river had a double gate; the centre stone, on which the gates closed, as well as the sockets for the pivots on which they had turned, are still in existence. Inside the gateways were the guard-rooms. In the interior, the forum, the *ærarium*, a bath-room, the streets, and other places that had been cleared, were examined with much interest, Dr Bruce explaining the various purposes to which they had been applied. The arrangements for warming the camp by means of heated air, as well as the drainage, were severally viewed; some of the coals used for the furnaces are still lying about, as also a quantity of bones of animals.

On leaving Cilurnum, the party visited Chester House, where, being too numerous to enter all together, they were admitted by detachments, and most kindly and courteously shewn, as far as time permitted, what was interesting in the house by Mr Clayton, as well as by Dr Bruce. The entrance hall was filled with treasures from the well near Procolitia, which was excavated by Mr Clayton, in October last; and in which there were discovered many thousands of Roman coins, mostly in copper, but also a few of silver and gold in beautiful preservation. Mr Roach Smith, the well-known numismatologist, was busy in the hall going over the coins. It was announced by Dr Bruce after dinner, that, up to that day included, 10,000 had been examined. Besides coins, there were found in the well, a massive votive tablet, dedicated to *Coventina* (an unrecorded goddess) by Titus Domitius Casconianus, a Prefect, commanding the 1st Cohort of Batavian auxiliaries, on which the goddess is represented

as floating on the leaf of a water lily, with a branch of palm in her right hand; and also many Roman altars, on several of which the name of Coventina occurs, and a beautiful sculptured stone representing three water nymphs; along with vases, rings, brooches, &c., all of which are carefully preserved by Mr Clayton. An exhaustive paper on the subject of the different inscriptions, &c., was read by him to the Newcastle Society of Antiquaries, in December last.

It has been supposed, that these coins, among which those of Hadrian, Antoninus Pius, and Marcus Aurelius are among the most common, were thrown into the sacred well as votive offerings to the goddess; on the other hand it has also been thought that they with the altars, &c., may have been placed there for concealment on some sudden alarm. The well itself, which was not visited by the party, is built of solid masonry, and is said by Mr Clayton to have measured 8 feet 6 inches by 7 feet 9 inches, and to have been a little over 7 feet in depth.

All those present having been conducted through the house, and enjoyed a view all too rapid of its treasures inside and out, and the President in name of the Club, thanked Mr Clayton for the great treat he had afforded them—Dr Bruce now led the party westward in the line of the wall, a portion of which was pointed out in a plantation near the house. This was continued along the public road for some distance, being at intervals very distinctly traceable, forming as it does now part of the roadway. This is part of the military road constructed by General Wade. At Walwick, "General Wade's tree" was pointed out by the roadside—a wide spreading Scotch Elm, under which the great road-maker took shelter during a thunderstorm. Continuing along the road and still along the line of wall, the top of Tomertay hill was reached, from which a fine view of what remains of the wall and vallum was obtained, stretching away westward. Passing on, on our right a fine piece of the wall was seen, which had been cleared from its overlaying mound of earth and turf; in this portion of the wall, the remains of one of the small

turrets, said to have been placed at intervals of 300 yards along the wall, were noticed. This is the only one of these turrets remaining along the whole length of the wall. Reaching the top of the next hill, a Castellum was examined. The wall here has been built over basaltic rock, through which, however, the Romans had indomitably cut their way, so as to keep their fosse at a uniform level. Entire blocks of stone, one of them calculated to weigh 13 tons, have been removed with enormous labour; this, the largest of many huge blocks, has been subsequently split; several of the others bear marks of similar but unsuccessful attempts to break them up. The view from this hill was magnificent. Turning homewards, the remains of a Roman camp composed of earth were examined; this camp, Dr Bruce supposes to have been occupied during the building of the wall. And now returning along General Wade's road, the party reached Chollerford, having taken about an hour to the return journey, all well appetised by their walk. After an excellent dinner, in an upper room outside the hotel, our numbers being too large to be accommodated in the house, an interesting paper on Stamfordham Church, by the Rev. J. F. Bigge, was partly read. It will appear in our Proceedings. Dr Bruce then read an elaborate paper, on Coventina's Well and its contents; for which, as well as for his unwearied exertions during the day, which had afforded so much gratification to the members of the Club, a hearty vote of thanks was paid him at the instance of the President.

The last field meeting of the year was held at Newtown St. Boswells, on the 26th September, and notwithstanding that there was nothing very specially attractive in the programme for the day, it was largely attended, the following being present —Dr C. Douglas, President; Dr F. Douglas and Mr Hardy, Secretaries; Sir George H. S. Douglas, Bart., M.P.; Drs Dewar and Grierson, Melrose; and Dr Robertson, Otterburn; the Rev. Drs. Gloag and Allardyce; the Revs. J. F. Bigge, J. Farquharson, A. Gourlay, M. H. Graham, J. S. Green, J. Hunter, D. Paul, R. F. Proudfoot, J. M. Robertson,

J. Hill Scott, J. H. Walker, and G. J. Young; Messrs J. B. Boyd, W. B. Boyd, F. J. W. Collingwood, Wm. Currie, F. B. Douglas; Professor Veitch; Captain Forbes, R.N.; Messrs T. Arkle, A. H. Borthwick, A. Brotherston, John Clay, A. Currie, J. S. Dudgeon, W. Elliot, A. H. Evans, John Freer, J. B. Kerr, John Manuel, Robert Renton, John Scott, A. E. Scougal, Douglas Simpson, J. Smail, Addison Smith, W. Stevenson, John Thomson, T. Turnbull, C. Watson, C. M. Wilson, and James Wood.

After breakfast, three large waggonettes having been chartered from Melrose, the party drove off to Bowden Church, the burial place of the Roxburghe family; there is also a well-kept aisle in which are interred the Carres of Cavers Carre. Near the entrance to the latter is a tombstone, evidently erected by a ripe scholar, proud of his Latinity. It is headed by the inscription—

“HIC DEPOSITI
SUNT JACOBIFILII
IN LONGA PARTE.”

Which being translated reads, “Here are laid the Jamiesons in (or of) Langside.” In the church there is a very old oak gallery belonging to the Carres, covered with heraldic emblazonment. In the adjacent village was born the poet, Thomas Aird.

On leaving Bowden, the route was taken for Cavers Carre. Passing Kippilaw, the *Utricularia vulgaris* was gathered in a pond near the road side, but not in flower; it had, however, been gathered before and identified by Dr Dewar, who was of the party. Arriving at Cavers Carre, where we were joined by the occupants of a fourth waggonette, we were politely shewn the different objects of interest about the fine old place by Mr Riddell Carre. Most conspicuous there were four huge silver firs—at 3 feet from the ground the circumference of two was found to be $16\frac{1}{2}$ feet each, and their height ascertained to be about 90 feet; the girths of the other two were found to be 14 feet 10 inches, and 13 feet 4 inches respectively. Attention was attracted to old

sculptured stones, let into the walls of the by no means modern house, one of which, along with armorial bearings, had the names *Ralph Kerr* and *Marion Haliburton*—the date 1532. Linthill was next visited, where we were most hospitably entertained by Mr and Mrs Currie. The situation of the mansion house was much admired, overlooking the beautifully wooded banks of the Ale, with its closely shaven lawn and terraces in front. In the garden, on the other side of the Ale water, stands a magnificent Spanish Chestnut, which was $14\frac{1}{2}$ feet in circumference some four feet from the ground. An Apricot tree, in the N.E. corner of the garden, covered the wall to the length of about 62 feet, and was said to be very productive. *Epipactis latifolia* was picked up at Linthill.

The party then, resuming their carriages, proceeded to Riddell, by way of Lillieslie, visiting in passing the old Churchyard there, and also in the village an interesting collection of objects of Natural History and antiquity, made by Mr Turnbull, the post-master. The carriage in which Mr Hardy was made a detour to Clerklands, to view the immense Beech tree by the side of the road there ; it was found to measure, about six feet from the ground, $16\frac{1}{2}$ feet in circumference ; at about fifteen feet high it has four large arms, each fitted to be a tree, and a fifth, still larger, has been broken off. The fine woods about Riddell were much admired, but time pressing, the conveyances were again put in requisition, and the return was made to our starting point through the villages of Midlem and Bowden, having the Eildon hills on our left. Near the road quantities of the *Geranium lucidum* were seen growing on the dykes, and *Sanguisorba officinalis* was also seen in abundance. After dinner, the following gentlemen were proposed for membership—Colonel Edmund Palmer, R.A., Alnwick ; Messrs Wm. Lang Blackie, Holydean ; Andrew E. Scougal, Inspector of Schools, Melrose ; Dr James Denham, Dunse ; Rev. John Donaldson Currie ; Rev. George J. Young, Newtown ; Rev. J. M. Allardyce, D.D., Bowden ; Dr Ed. Chas. Robertson,

Otterburn ; and Mr John Thompson, Kelso. Mr Hardy then read some "Ornithological Notes," by Mr Valentine Knight ; and extracts from a paper on "the Riddell family" were read by Mr Arkle. The party then broke up after a most agreeably spent day.

Mr Hardy informs me that on the day previous to this meeting he found *Fedia dentata* and *Thlaspi arvense* in turnip fields near Clarilaw. He also gives the following geological notes in reference to this day's excursion—"The rock in the tract passed through was greywacke, and its prevalence was conspicuous in the numerous stone walls enclosing the fields. Porphyry dykes occasionally intersect the Silurian rock, and appear here and there as indicated by small reddish heaps of broken stones by the way-sides, to be used for road metal. Where the greywacke approaches the surface and forms craggy knolls, the soil is free and fertile ; where there is more clay, it is less kindly and difficult of drainage."

In bringing to a conclusion this report of the meetings of our Club at the end of its forty-sixth year, I think I may fairly congratulate the members on its continued prosperity. We have to lament the death of ten members during the year. The list is headed by the name of the last of the original members of the Club, and for many years its Secretary, Mr Robert C. Embleton. The state of his health has long prevented Mr Embleton from taking his place among us ; but a reference to the earlier volumes of our Proceedings will abundantly show, what a high position he held among his compeers. His addresses and many able papers stand as a lasting monument to his unwearied industry and scientific knowledge. The following is a complete list of members deceased during the year :—Robert R. Embleton, Beadnell ; Rev. Wm. Lamb, Ednam ; Rev. Wm. Procter, Doddington ; John Stuart, LL.D., F.S.A., Scot., &c. ; Andrew Wilson, Coldingham ; Henry Hunter, Alnwick ; E. A. Storer, Alnwick ; J. Bailey Langhorne, Outwood Hall, Wakefield ; and John A. Johnson, Tweedbank, Kelso.

And now, gentlemen, my only remaining duty is to propose for your approval my successor as President ; and I am sure the nomination will be received with acclamation, when I mention the name of the distinguished Professor of Botany in the University of Edinburgh, Dr John Hutton Balfour.

OBITUARY NOTICES.

THE REV. WILLIAM PROCTER, M.A.

William, the fourth child and third son of the Rev. William Procter, vicar of Alnwick, and of Mary Aislabie, was born at Bowes, in Yorkshire, 17th March, 1791. He was educated in the Grammar School, at Alnwick, his father having been appointed master of that institution, July 9th, 1794, when his son William was only three years old. Good scholarship was a family accomplishment, and this Mr Procter evinced when he proceeded to Cambridge. Mr Procter was a Fellow of St. Catherine's Hall, and when he died was senior member of his college. He took his degree of Bachelor of Arts (Senior Optime) in 1813; Master of Arts 1816; *ad eundem*, Durham, 1854. He was ordained Deacon by the Bishop of Durham, in 1816; and Priest by the Bishop of Ely, in 1819. In 1824, he was appointed Lecturer of Berwick-on-Tweed, by the Hon. Mercer's Company, London. He was licensed to the curacy of Norham, in 1829, the Rev. W. Darnell, being Vicar; and to the curacy of Alnwick, in 1833. He was presented to the living of Doddington in 1834, by the Duke of Northumberland. In 1854, he was chosen Hon. Canon of Durham; and was Rural Dean of Bamburgh from 1862 to 1866. Mr Procter was much respected and beloved in his parish and neighbourhood. Possessed of much mental activity, he took a deep interest in all the leading subjects and controversies of the day, and was constantly sending letters to the newspapers and other periodicals to within a few weeks of his death. Although latterly very infirm, his mind was clear to the close. His last sermon was preached on the 17th November, with his usual energy. He died at Doddington, on December 30th, 1876, aged 85.

Mr Procter was an energetic parochial clergyman, ever mindful of the great trust reposed in him, and earnest in its fulfilment. He introduced many beneficial improvements, both in the proprieties of the place of worship where he officiated, and in procuring a becoming residence ; both of which are now, in their renovated state, conspicuous and ornamental objects in the great valley of the Till. By the measures which he took to instruct the young and elevate their tastes, he provided the most effectual means for their future well-being and guidance through life. For an outline of what he effected, I am indebted to one of his family.

When Mr Procter came to Doddington, the church was in a ruinous condition. The roof was covered with red tiles, always unsightly on a public building. The west arch was built up, the entrance through it to the church being by a small door. There were several steps down to the floor. Inside, there were seven square pews. The church was so damp, that the wet ran off the cushions. The pillars were covered with wood, and white-washed. There were four plain sash windows. The congregation consisted of two church families ; seven people in the church on Sunday being considered by the old sexton a large audience. The vicarage house was in even a worse state of neglect than the church. On Mr Procter's appointment to the vicarage, he immediately set about building the present vicarage, by borrowing money from Queen Anne's bounty, which was repaid in his lifetime. As soon as he came into residence, he lost no time in raising money to restore the church, and build again the chancel of which only the foundations were left ; but unfortunately a sufficient sum could not be obtained to restore it to its original length. Mr Procter much wished to complete the restoration of the church, and had plans drawn out some ten years ago, but the work still remains to be done.

The National School being found too small, Mr Procter raised money to build the present structure and the master's house in 1850. As the accommodation is again defective, he tried some years ago to have a class-room added to the school, but was not successful.

During his incumbency, the Parochial Library was increased from 600 to 800 books. A Reading-Room was established in the village, which is self-supporting. Penny readings are given in

connection with it. The Church Choir was also self-supporting, and the Sunday School, which Mr Procter established in Doddington, was always largely attended.

As adding to the village amenities, Mr Procter originated the design of the Cross over the Dodd well, which was mainly erected at the expense of the Earl of Tankerville. Mr Procter took the responsibility of seeing the work carried out, and while he lived saw that it was kept in repair.

As a member of the Club, Mr Procter took a cordial interest in its well-being, and assisted its researches. Nearly all the Rock-inscriptions in the Doddington district were discovered by him and the members of his family. To the records of the Club he did not largely contribute, but we owe to him the revisal of his excellent son's notes on Chatton; a memoir of his brother-in-law, Mr William Dickson, of Alnwick; and some remarks on Bishop Bek's disposal of the Alnwick barony. About a year before his death, he had finished in MS. a History of Doddington, which may contain important matter. For its completion, Mr Dickson also lent his aid. Mr Procter, besides smaller pieces, was author of (1) Five Discourses; On the Personal Office of Christ and of the Holy Ghost; On the Doctrine of the Trinity; On Faith; and on Regeneration. 1824. (2) The Epiphany (a Sermon) with a Chronological Appendix, 1850. (3) Pastoral Letter to the Inhabitants of Doddington, on the 5th November, 1850. (4) Wiseman weighed, the Tactics of Trent. 1851. (5) Marriage of a Deceased Wife's Sister shown to be forbidden in Scripture. 1858. (6) Confirmation, a Sermon, 1866. (7) Bishop Colenso's principal objections to the historic truths of the Pentateuch anticipated and answered more than 200 years ago by Archbishop Usher, 1863.

J. H.

DR JOHN STUART, F.S.A., Scot., M.R.I.A. &c., &c.

John Stuart was born in November, 1813, in the parish of Forgue, a somewhat secluded district in Aberdeenshire. His father, Robert Stuart, was a farmer there, and afterwards proprietor of the estate of Aucharnie, in the same parish. The son was educated at the parish school of Forgue and at King's College, Aberdeen, and studied law in the office of Mr Stronach, of

Drumallan, advocate, in Aberdeen. In the year 1836 he was admitted a member of the Society of Advocates in Aberdeen, and continued to practise his profession there till 1853, when, on the recommendation of the Prime Minister, the Earl of Aberdeen, he was appointed one of the official searchers of records in the Register House, Edinburgh. In 1873, he was promoted by the Lord Clerk Register to the principal keepership of the Register of Deeds. While yet resident in Aberdeen, Dr Stuart had given ample evidence of that taste for archæological research, the subsequent development of which now constitutes his claim to public remembrance. Becoming a corresponding member of the Scottish Society of Antiquaries, he from time to time communicated to that body the results of investigations he was led to make in various parts of his native county. On removing to Edinburgh, he became a full member of the Society, and being in the following year, 1854, elected to the office of Secretary, he may be said to have become from that time forward the guiding spirit of an association in promoting whose objects he spared neither time nor pains.

In 1839, in conjunction with the late lamented Dr Joseph Robertson, he projected and carried out the establishment of the Spalding Club—a society formed on the model of the Bannatyne and Maitland Clubs, for the printing of the historical, ecclesiastical, genealogical, topographical, and literary remains of the north-eastern counties of Scotland. This society, which continued to exist till the year 1870, was mainly indebted for its great success to its founders; and if it could not have been carried on without the literary and antiquarian accomplishments of Dr Robertson, it had equal obligations to the industry and research of Dr Stuart, and to his admirable and exact business habits in discharging the office of secretary, which he held from the institution of the club to its close. Of the thirty-eight volumes which it from time to time gave to the world, no less than fourteen were produced under Dr Stuart's editorship; the contributions of Dr Stuart consisting of *The Miscellany* of the Club, in 3 vols., *Extracts from the Presbytery Book of Strathbogie*, *Blackhall's Brief Narrative*, *Extracts from the Council Register of Aberdeen*, *Selections from the Records of the Kirk-Session, Presbytery, and Synod of Aberdeen*, *Spalding's Troubles of Scotland*, *The Sculptured Stones of Scotland*, *The Book of Deir*, and a volume containing

a historical notice of the Club. He also edited, though not directly in connection with the Club, the *Poll Book of Aberdeenshire for the Year 1696*.

Prominent among these contributions to archæology were the two handsome folios on the "Sculptured Stones of Scotland," published in 1856 and 1867, through which, perhaps, Dr Stuart's name has become more widely known than by any other of his numerous publications. Copiously illustrated with plates, the work maintains a high value in the sale-room, while among antiquaries it is regarded as one of their most important books of reference. There is, we believe, no collection to equal it, whether regard is had to the remarkable character of the monuments dealt with, or the exhaustive way in which their history and relations are discussed. It may be that the writer's conclusions in respect to the interpretation of symbols will not invariably stand the test of criticism; but none will be readier than those who hold divergent views to acknowledge the industry displayed in the collection of materials, and the conscientious care with which these have been digested and arranged. Whatever difference of opinion there may be on other points, archæologists generally would seem to have accepted the opinion enunciated in this work as to the non-Druidical character of certain remains which people had been accustomed to associate with the ancient religion of Britain. By reference to record and charter evidence, and an examination of all that had been written about the Druids, it was shown that there was nothing whatever to connect them with the stone circles; while it was submitted that on being properly examined, the remains in question proved to be nothing more or less than ancient burial places. Another of the Spalding volumes which calls for special mention is the "Book of Deir," published in 1869. In this work Dr Stuart reproduced a manuscript copy of the Gospels, which belonged to the Abbey of Deir, in Aberdeenshire, and which, besides the interest attaching to it as a piece of seventh century penmanship, possesses great historical and linguistic value in respect of certain jottings on the margins and blank leaves, where the ancient clerics had made note of gifts presented to their monastery, and embodied a legendary account of its foundation by St. Columba and Drostan. On the editing of these curious records there was brought to bear a vast amount of learning and research, and the preface is one of

the things most frequently quoted in regard to the early, and especially the Celtic, history of Scotland.

During his long connection with the Antiquarian Society, Dr Stuart was a frequent and valued contributor to its Transactions. While many of his papers bespoke the special bent of his mind towards what may be called documentary archæology—a bent which led him to seek holiday relaxation in rummaging through the charter chests of old country houses—he from time to time dealt with more popular branches of the subject, such as early monuments and lake dwellings. The latter department of inquiry may be said to have been bequeathed to him by his friend, Dr Joseph Robertson, who was, perhaps, the first to investigate Scotch crannogs, and who, at the time of his death, had a paper on the subject in preparation for the press. Taking up the uncompleted work with characteristic industry, Dr Stuart produced for the Society's Transactions what is regarded as the most complete resumé of the subject anywhere to be met with. In his more peculiar walk, he edited for the Antiquaries two volumes of ancient chartularies, entitled respectively the "Records of the Isle of May," and the "Records of the Monastery of Kinloss," which were issued by the Society as separate publications. The archives of old religious houses generally would seem ever to have had for him special attractions; and up to the time of his death, he was engaged upon an account of the Priory of Restennet, near Forfar, which, from an examination of the buildings and certain references in its charters to grants from the early Scottish kings, he had come to regard as one of the very earliest existing specimens of Scottish ecclesiastical architecture. Equally a labour of love was doubtless an admirable paper on the Crozier of St. Fillan, which is printed in the Antiquarian Transactions.

Of Dr Stuart's researches among old family records there remain, among other results, the "Book of Panmure," two quarto volumes printed about three years ago for private circulation by the late Earl of Dalhousie, who, however, died just before the work was ready to be issued. At the instance of the Historical Records Commission, he some seven or eight years since entered on an examination of the charter chests of the Scotch nobility, in regard to which he furnished annual reports to the Commissioners' blue-books. This, it may be understood, was work specially congenial to his tastes; and in the course of it he struck upon a

notable document whose historical significance he illustrated in an independent publication. This was the original dispensation for the marriage of Bothwell with Lady Jane Gordon, which was discovered among the records of Dunrobin Castle. The paper, which was believed to have mysteriously disappeared at the time, had been the subject of much speculation; and while its recovery had an important bearing on the legality of Bothwell's subsequent marriage with Queen Mary, it afforded Dr Stuart the opportunity of discussing, as he did in the volume entitled "*A Lost Chapter in the History of Mary Queen of Scots*," the law and practice of Scotland relative to marriage dispensations in Roman Catholic times. This book was published by Messrs Edmonston & Douglas in 1874.

To complete the tale of this laborious writer's work, there remain to be mentioned two volumes of "*Extracts from the Burgh Records of Aberdeen, 1625-1747*," edited for the Burgh Records Society, and an edition in two volumes of the "*Archæological Essays of the late Sir James Y. Simpson*." A fitting recognition of the unflagging industry bestowed on so many curious and useful researches was made in 1866, when the University of Aberdeen conferred on Mr Stuart the degree of LL.D. By the Archæological Institute of Great Britain and Ireland he was elected an hon. member; as also by the Royal Irish Academy; and a similar compliment was paid by the Society of Antiquaries of Zurich, and the *Assemblea di Storia Patria* in Palermo. As has been indicated, his line of study lay for the most part within a comparatively limited range. In the more general bearings of archæology—its relation, for example, to the great question of the antiquity of man—he seemed to take comparatively little interest. But in the deciphering of dim old records, and the investigation of correlative matters calculated to throw light upon them, he has undoubtedly done yeoman service; and his success in this direction is all the more remarkable when it is considered that, apart from a good knowledge of classical and mediæval Latin, his linguistic acquirements were rather meagre. Taking him all in all, the Scottish Society of Antiquaries will sadly miss their assiduous and indefatigable secretary.

For a considerable number of years Dr Stuart had resided at Newmills, in the parish of Currie, an estate which he had purchased, the vicinity of which to Edinburgh enabled him to enjoy

the benefits of a country residence without interfering with his duties at the Register House. Though never of a robust constitution, he long continued to enjoy comparatively good health, but for some time back his strength had begun to fail. It was on this account he went for a few weeks to Ambleside, where he sunk under an attack of pleurisy, on the 19th July, 1877.

Dr Stuart was twice married—first, to the only daughter of the late Alexander Burness, Esq., of Mastrick, near Aberdeen; and secondly, to Jane, daughter of the late Colonel Ogilvie, of the Indian Service, of the ancient family of Aucheries in Brechin, who survives him. By his first marriage he leaves two daughters, one of whom is the wife of the Rev. John Woodward, incumbent of St. Mary's, Montrose. No children of the second marriage survive.

In his personal relations, Dr Stuart was a man of somewhat shy and reserved demeanour. His intimates, however, found him a pleasant companion, and in his undemonstrative way, he enjoyed society, cordially appreciative of humour, if showing little of that quality on his own account. A member of the Episcopalian body, he was strongly inclined to Ritualism and High Church views generally. He was connected with All Saints' congregation, Edinburgh, and as a resident for many years in the neighbourhood of Balerno, he took a prominent part, in conjunction with Lord Morton, in securing the erection of an Episcopalian chapel in that village.

Nearly forty years, says the "Scottish Guardian," have now elapsed since a small band of young men, of whom only two survive, all natives of Aberdeenshire, and all zealous members of the Episcopal Church, began their literary labours at Aberdeen in connection with the Spalding Club and otherwise. One of the youngest, and certainly not the least accomplished of their number, Mr John Dunn, advocate, was first removed; Dr Robertson died next; and now Dr Stuart has been taken away. *Requiem æternam dona eis Domine; et lux perpetua luceat eis.*

This account of Dr Stuart is compounded of two memoirs that appeared in the "Scotsman" and the "Scottish Guardian," at the period of his decease, which so amply detail his merits, that anything further would be superfluous. He became a member of our Club, Oct. 27, 1858, on the introduction of Mr Tate, and thenceforward took an active share in promoting its welfare, and

for a busy man, has written much for its Proceedings. His last letter received refers to the report of the meeting of Gullane, in May, 1877, offering facilities in Edinburgh for further inquiries; the parish of Dirleton having proved unexpectedly full of archæological indicia, that no writer had touched upon. Dr Stuart's articles written for the Club are:—1. On Melrose, vol. iv., pp. 145-148. 2. On Chirnside, *Ib.* pp. 184-189. This paper is a misnomer, for it relates mostly to Fishwick. 3. On Kelso, *Ib.* pp. 261-268. 4. On the Monastery of St. Ebba and the Priory of Coldingham, vol. v., pp. 207-219. This paper brings together a number of new facts, not previously made use of. In this he still sanctions the blunder first committed by Mr A. A. Carr, the historian of Coldingham, and then continued by Dr Johnston, in his "Flora," and "Natural History of the Eastern Borders," that ten acres of ground in the territory of Coldingham, called the Fleurs, *i.e.* flats, were under cultivation with *flowers*. 5. On the Nunnery of North Berwick, vol. vii., pp. 82-85. 6. Notices of the Early Ecclesiastical History of East Lothian and the Bass, and of Caves as the Retreats of the Early Saints, *Ibid.* pp. 86-90. 7. Obituary Notice of Mr J. C. Langlands, *Ibid.* p. 188. 8. The Early Ecclesiastical History of Dunbar, *Ibid.* pp. 422-429.

An Account of Lesbury Parish, Northumberland. By the late GEORGE TATE, F.G.S., &c. (Continued from Hist. Ber. Nat. Club, vol. vii., p. 462).

ALNMOUTH.

Alnmouth is on the south-east part of Lesbury parish, and has an area of 296A. 1R. 9P., lying chiefly along the sea shore from the mouth of the Aln to Marden House, on the north-east side of the river. Three detached portions are on the south side of the Aln, one with an area of 3A. 1R. 7P., and the others 14A. 3R. and 31A. 2R. 3P. On the north extremity of the township is another detached portion of 11A 1R. 19P., bounded both on the north and east by lands belonging to Longhoughton.

The town or burgh of Alnmouth is five miles east of Alnwick, on the left bank of the Aln, about 50 feet above the sea level,

where the river disembogues into the bay. It is usually called Alemouth, and sometimes Yellmouth; but the spelling of the name has been very varied.—We have Anyemouth in 1205 [Auneimuwe-Test. de Nevill], Alnemuth in 1251, Alemouth in 1454, Ailmouth in 1519, Aylemouth in 1534. But it had an older name in the Saxon and early Norman period, as is evidenced by the Alnwick Abbey charters. The foundation charter by Eustace Fitz-John in 1147 gave to the Abbey the church of Lesbury, with the chapels of Houghton, Alnwick, and St. Waleric, and also one measure of land in his burgh of St. Waleric; and that St. Waleric is the same as Alnmouth is proved by subsequent charters which substitute Alnmouth for St. Waleric as one of the chapels under Lesbury. This obscure Saint had been held in esteem in this district; for Newbiggin, in this county, was also anciently called St. Waleric; and in one of the charters of Newminster Abbey, German Tysun gave 10s yearly to be paid at the feast when the fair was held at Alnwick. This Saint, who died on December 12th, 622, was the first Abbot of the Monastery of St. Waleric in Picardy, to which, William the Conqueror gave lands in the vill of Takelerye* (Cal. Gen. i., p. 49).

At an early period Alnmouth had been a place of no small importance, doubtless on account of its convenient situation at the mouth of a tidal river, accessible by the small vessels which then navigated our seas; and here stood in Saxon times a church in which the inhabitants worshipped. In Norman times the burgh and manor were parcel of the barony of Alnwick; and the successive barons, the Vescys and the Percys, were the feudal lords of Alnmouth; their history need not here be entered into, as it is fully given in the "*History of Alnwick*." To Eustace de Vescy King John, in 1207, granted a port at Alnmouth, and a market

[* St. Waleric more probably owes his celebrity to Norman rulers than to Saxon zeal. It was William the Conqueror's devotion at the shrine of this local Saint, when several of his ships had been wrecked and their crews drowned, and a panic had spread through the whole fleet and army; and his subsequent success in invading England, that induced his grateful followers to commemorate their adopted patron. "He ordered the body of St. Valery to be brought out, and to be exposed to the open air, imploring a wind." (William of Malmesbury, under date 1066). See also St John's Four Conquests of England, vol. ii., pp. 245-246. There were two Saints Walaric or Waleric,—Hampson's *Kalendars of the Middle Ages*, vol. ii., p. 390; their respective holidays were April 1 and Dec. 12.]

there every Wednesday, and a fair on St. Edmund's day (Nov. 20th) and the day following.* According to the *Placita de quo Warranto*, William de Vesey, in 1292, claimed by prescription, that he had in Alnmouth a market and fair, tumbrill, pillory, toll and assize of bread and ale, the market being held weekly on Wednesday, and the fair for eight days on the vigil, on the day (29th Aug.) and on the morrow of the beheading of St. John the Baptist, and for five days following.

No part of Alnmouth was granted by the superior lord on military tenure, nor was any of it reserved by him as demesne land; but the whole of the lands and houses, excepting two holdings, were free tenancies, subject to small quit rents. When John de Vesey died in 1289, Alnmouth yielded to him in rents, tolls, and prisage, £30 yearly; and in 1368, Henry de Percy had a rent at Alnmouth of £4 3s 9d, called Burghmale; free tenants paid 19s 4d, the fishery in the Aln yielded 2s, the perquisites of the Court 3s 4d, and the toll 2s yearly. Burgh courts, presided over by the steward of the baron, were held in Alnmouth till 1869, when they were discontinued. Some important personages in early times were owners of property in Alnmouth. John de Alnmouth was, in 1323, included in a list of knights and esquires returned by the sheriff of the county.† Richard de Emeldon held property there in 1333,‡ [his widow, Christiana, afterwards wife of Sir William de Plumpton, also held it at her death, 1363-64;]|| and it descended to his daughter Jane, wife of John de Stryvelyn; in 1390, three tenements there belonged to her,§ and of these three one burgage subsequently passed to Sir John de Middleton, and to his wife Christiana, who held it in 1396.¶ Property too belonged to ecclesiastical bodies; William de Vesey, in 1200, granted one measure of land in Alnmouth to the canons of Brinkburn; and Robert de Emeldon, vicar of Lesbury church, gave one toft and a quarter of an acre of land in Alnmouth to Alnwick Abbey.¹ In 1328-9, Adam le Colererman representing the Abbot of Alnwick, holds property at "Alemuth."²

The early importance of Alnmouth port is shewn by royal

* Rotuli Chartarum, p. 174.

† Cott. Claud. c. 11. ‡ Cal. Inq. post Mort. vol. ii., p. 56.

|| Ibid. ii., p. 289. § Ibid. iii., p. 127. ¶ Ibid. iii., p. 207.

¹ Arch. Æliana. Hist. Aln. ii., p. 9.

² Cal. Inq. post Mort. vol. ii., p. 289.

commands during war times. The bailiff of Alemuth was, in 1316, ordered to send the ships of that port, sufficiently munitioned and victualled to go to Gascony; in 1326, all ships of Alnmouth carrying thirty tons and more, were commanded to be at Orewell, in Suffolk, sufficiently armed and victualled for the defence of the kingdom; and, for this purpose, Ralph de Neville, Thomas de Grey, John de Fenwick, and John de Lillburn, were appointed supervisors of the ports of Alemouth, Warkworth, Dunstanburgh, and other northern ports. Commands were also addressed in 1333 to the bailiffs of the villis of Alnmouth, Warkworth, Emildon, Bamburgh, Halieland, and Twedemuth, to detain all the ships of these ports, carrying fifty tuns of wine and upwards, and with all speed to equip them with munitions of war, that they might be ready to go forth in defence of the kingdom. Similar commands were issued in 1334; and in 1336.† [On the 13th Dec. 1336, the bailiffs of the towns of Alemouth and Tynemouth are directed to send three or four trustworthy men to Norwich, on the Friday next after the feast of the Circumcision of our Lord, to take council for the defence of the kingdom, and other business of great moment.]‡ Probably in Saxon times Alnmouth was more important than Alnwick, but, in course of time, the latter became pre-eminent, from increased trade and population, and Alnmouth became the port of Alnwick. Henry VI., in 1464, granted to the burgesses of Alnwick to make and establish for ever a free port in Alnemouthe, and license to ship load and unload there wools, skins, wool-fels, coals, and fish.¶ Such exports were the raw produce of the broad pastures and wild moorlands of the district, in which large flocks and herds of cattle and sheep grazed; and while little corn was grown none could be exported. Sufficient corn indeed was not then grown in the district to supply its wants; and hence corn was imported into it, even in the reign of Henry VIII.; for it is recorded in 1533 that seven Scottish ships had sailed out of Scotland to capture ships laden with corn for Berwick; and it is added that part of it was ready to be sent to Aylemouth and Holy Island. The relation of Alnmouth to Alnwick as its port is shewn in a document among the Corporation muniments; for

† Rot. Scot. vol. i., pp. 248, 259, 309, 311, 324, 468.

‡ Ibid. vol. i., p. 475.

¶ Hist. of Alnwick, ii., Append. p. v.

in an agreement made in 1529 between the merchants and burgesses of Alnwick, and the surveyor of the Earl of Northumberland, the former covenant to make a weir or haven in Ailemouth, on condition, that the Earl would supply sufficient wood for the purpose, and that the Earl's tenants carry the wood.

In the Royal Survey of 1569, by Hall and Humberston, the account of Alnmouth is of interest. Nearly all the property consisted of free burgage tenements paying small quit rents, two only were copyholds; one, ten acres of land lying in the fields of Lesbury, held by Roger Harrison, according to the custom of Cockermouth, at a rent of 10s; the other, one tenement and sixty acres of land and meadow of the vill and fields of Alnmouth, held by George Clark, at the rent of 60s. There were 61 burgages, two of them of considerable extent. Richard Midlum held one tenement and burgages at the rent of 19s; he died at Alnmouth, in 1582, and in accordance with his will was buried in Alnmouth church. He was descended from Loretta del Boteric, daughter of Galfrid de Goswick; and she held property in Alnmouth prior to 1396. Her daughter and heir married John de Midelham, and from them in succession came Thomas de Midelham, who died before 1433; and John de Midelham. Thomas Midelham, who followed, was born at Wooperton, baptised at Bewick chapel, and died in 1582;* besides his property in Alnmouth he had other estates; his farmhold of Glanton he sold to Roger Procter, of Shawdon, for 40 marks; to his son, John, he left one farmhold at Goswick; another to his daughter Isabella, and housesteads to his other daughters; and all the residue of his lands, including those of Alnmouth, to his grandson, George Mydlam; who married Barbara, daughter of John Carr, of Lesbury, Esq., and died in 1586. Agnes, daughter and heir of George Midlam, who was two years old in 1587, married Ephraim, the second son of Francis Armorer, of Belford, Esq., and they had two children, a daughter Margaret, and Ephraim,

[* In 1504, "Thomas Medelam, of Ailmouth, gentleman," gave up to the Prior and Convent of Durham, his right of patronage of the Chantry of the Blessed Virgin and St. Margaret, in the parish church of Holy Island, which he affirmed his predecessors, owners of the estate of Goswick, had always held.—Raine's North Durham, p. 148. Mr Tate's information about this family is derived from the History of North Durham, pp. 182, 183, where there is a pedigree. See also in addition, p. 185. In 1624, the daughters of William Swinhoe, late of Ailemouth, are mentioned. Ibid. p. 158, note.]

son and heir, who was one year old in 1615.* Ephraim Armorer, of Alemouth, gentleman, appears as a freeholder in the county rate-book of 1628 ; but after 1646, I have seen no records of this family in connection with Alnmouth.

The other large freehold in 1569 was held by the heirs of Richard Clerkson, consisting of one tenement and 60 acres, called Chalford's lands, one croft called Baker's croft, one close called Close hill, one watery bog called Howle kyll, one burgage and certain lands in the vill and fields of Aylemouth at a rent of 25s 10d.

The quit rents of the other burgages ranged from 3d to 2s 6d yearly ; and it may interest some to give a list of the surnames of the burgesses of Alnmouth in the year of grace, 1569.

Colston	Hepple	Shawe	Wilkinson	Downey
Spence	Walker	Chaux	Walter	Kennyte
Gybson	Colstayne	Walker	Dreydon	Awmerly
Watson	Slegge	Dagleys	Man	Browne
Dawnde	Story	Adam	Cuthbert	Midlam
Boyes	Whitley	Alnewick	Dawson	Clerkson
Blaketer	Bramston	Kennetty	Finche	Harryson
Symson	Walker	Chawndlaine	Carre	Anderson
Nicholson	Smart	Clerk	Dobson	Pringle
Wrey	Gaire			

[The clear rental of the manor above reprises was £8 3s 11½d per annum.]†

Before the Union of the Crowns of England and Scotland, a beacon was maintained by the burgesses of Alnmouth on the Watch hill or Wallop hill, at the west end of the town. Clarkson, in his Survey, begun to be made in 1567, says—"The service of the sayd burgesses is in the time of warres and necessitye to keep, upon their own charge, one good sur watch upon the Wallop hill, as well by daye as by nighte, and also to have ther two beakens of wood sett upon the said hill, the same to be made for fyer pannes to hang therein for warning of the countrie as opportunity shall serve by land or by sea, over and besides the night and neghborly watche aboute the towne."‡

Coming down to more recent times, we find from the county rate book that the principal owners of property in Alnmouth in

* Ber. Nat. Club's Proc. vol. iv., p. 23.

† Dickson's Hist. of Alnmouth, p. 55.

‡ Maclauchlan's Notes, p. 4.

1663 were, Mrs Katherine Goodrington, Mrs Mary Moore, and Mr Thomas Bynion. In 1667, William Archbould was the chief owner; and in 1672, his successor, Jerrard Archbould, held twenty-four burgages in Alnmouth.* But in 1682, Alexander Browne, of Twizell, in the county of Durham, purchased this property for £1000, which was held by his family till 1732.

This Alexander Browne, ancestor of Major Browne, of Lesbury House, first settled at Ewart, in Northumberland, in 1670. He must have been wealthy, for besides acquiring his Alnmouth property he, in 1695, bought Shawdon, and in 1700, Doxford from John Procter. His son, William, who succeeded to these estates, was also owner of Bolton, Woodhouse, and Crawley; and in 1712, bought the Branton estate from Edward Collingwood, of Alnwick, and others, for the sum of £2600. By his will made in 1702, besides bequests to his grand children, he gave to his eldest son, Thomas, his estate in Alnmouth and Seaton House, with the tithe there; to Alexander, his second son, his estate at Doxford, with the tithe there, he paying thereout £300 to each of his brothers William, Nicholas, and Thomas; and to his son Nicholas, of Ewart, his estate in Bolton and the manor of Shawdon, Woodhouse, and Crawley; and to Joseph, his estate in Branton.

He lived in Alnmouth. Horsley, the antiquary, says, in 1729 —“that no house of note is built here except that of Thomas Brown, Esq., who is the proprietor of most of the ground that belonged to or is adjacent to the town.” But in 1731 and 1732, Thomas Brown sold his property in Alnmouth to Edward Gallon, of Alnmouth, and it continued in the possession of his family till the death of — Gallon, an imbecile, when it was sold by order of Chancery, and the proceeds divided among her heirs. The whole was bought by the Duke of Northumberland.

To the township of Alnmouth belonged a common—the Folkland of Saxon times—over which the inhabitants had pasturage for their cattle and other rights and privileges. One part of this common, containing about 100 acres, called the inner or Alnmouth common, adjoins the town on the south and the sea on the east. Another tract of common, a mile further northward, and adjoining the sea on the east, was in the parish of Longhoughton, and was formerly called Longhoughton common, and contained 520 acres; and over this, from time immemorial, the resident

* For these and others, see Dickson's Chapters on Alnmouth, p. 17.

freeholders and their tenants enjoyed rights of pasturage; but these rights were brought to an end, in 1817, when it was enclosed and divided among the freeholders, the Duke of Northumberland taking one sixteenth as his share as lord of the manor. The freeholders of Alnmouth and their tenants still, however, retain the rights over the Alnmouth or inner moor.

An agreement made June 1, 1688, copies of which are among the title deeds of freeholders, throws light on these commonable rights.

It was then agreed between William Brown, of Ewart, gentleman, on the one part; and on the other part by Edward Roddam, of Littlehoughton, Esq.; William Fenwick, of Lesbury House; George Burrell, of Craster, gent.; John Wilkinson, of Newcastle, merchant; Ralph Carr; William Armorer; Michael Coulter, of Lesbury, gent.; Thomas Carr, of Bondicar, gent.; Edward Adams, of Longhoughton, gent.; Wilfred Lawson, of Wakefield; Edward Castles, of Warkworth, gent.; George Nesbitt, of Birling; Thomas Benyon, of Alnmouth, gent.; John Grey, William Baird, George Castles, John Wright, George Wood, Sen., Percival Robinson, John Walker, Robert Trumble, and George Young; all of Alnmouth, for the division of the in-common. The said William Browne, for his proportion of the division it is agreed, "shall begin at the foot of Mr Benyon's winde or laine and so northward as far as the burrough dyke goes, till it comes to the corner of the garden dyke, and so straight up the common wayne way that goeth to Lesbury, till it come to the end of the balk in the Haugh hill, and from thence north-east to the corner of Marden dyke, which part or proportion for him and his heirs for ever shall belong and appertain." The freeholders above-named and their heirs, &c., shall hereafter enjoy for their own use the remainder of the Incommon of Alnmouth, except the Cheese hill and Church-yard, the first belonging to Mr Binyon, and the other to the said Mr William Fenwick, vicar of Lesbury. William Browne agrees to maintain the fences between the freeholders and himself against all goods except sheep; and he has liberty and wayleave to drive his beasts and goods to the outfield common. The freeholders agree to rent jointly, from the Duke of Somerset, the coney warren, and each to pay proportionally to quantity and value occupied. All shall have liberty to cut and carry away ferns and brackens upon any

part of the Incommon, as formerly. If William Browne or his heirs burn ware or kelp within the grounds of the said freeholders, he shall give them reasonable satisfaction ; he shall also have liberty to drive his goods to Holme Kiln* to water, and to carry away water from any wells within the grounds of Alnmouth. If he buy any freeholds, he shall put no more stints on the Incommon than the majority of the freeholders think proportional to the value and quantity of the purchase. If Michael Coulter find evidence of a certain parcel of ground, called Adams' Land, which shall or may happen to lie within either parties Incommon of this division, he shall have satisfaction for the same.

Till the end at least of the last century, the freeholders maintained their right to the common. Formerly they received payments for laying sea-ware on the common, and for any encroachments thereon ; and at a meeting held by them on April 25th, 1797, they resolved that a party who had placed a saw mill on the common, should immediately pay 5s for the privilege, otherwise they would break and pull it down.

Each burgage has two stents on the common ; there are now occupied stents for 36 cows and 8 horses. The shepherd receives 8 shillings and a penny for each stent. Each stent is worth £4.

The Duke claims all acknowledgments for deposit of slates, wood, sawpits, bark pits, &c. Stones from the beach pay 1d per load ; bark pits, 1d each ; herring boats, 1d each. Each freeholder is invited to dinner, with a bottle of wine, about Michaelmas.

In the eighteenth and early part of the nineteenth century Alnmouth had a considerable trade, especially in the export of corn, evidencing the progress of agriculture in the district. Mark, in his Survey, in 1730, says " It has a very good harbour for ships, and is the only flourishing place for trade and shipping except Blythes-Nook between Newcastle and Berwick." Wallis, in 1769, says—" The principal export is corn kept in large granaries, the largest perhaps in the county ; they import Norway timber and goods from London, Holland, and other places. A new ship of near 300 tons, was built and launched at this port on Wednesday, 13th March, 1765, supposed to have been the first ever built at it." Alnmouth continued an important place

* Commonly called the How Kiln ; it was a large pond on the Common, but has been drained away.

for the export of corn till the termination of the war with France, before which as many as eighteen vessels were in the harbour at the same time; but after that the export trade declined and was entirely extinguished by the formation of railways. Sixty years ago numbers of huge store-houses for corn were in Alnmouth—high, plain buildings, some five or six stories high, with small latticed windows—all ugly enough—the town appearing more a collection of granaries than of dwelling houses. Most of them now are converted into dwelling-houses. [In 1746, there was some trade in kelp.* At one time ten ships might be seen in Alnmouth altogether, which were all loaded with oats for Scotland.†]

Small ships lie safely enough in the harbour, which being formed by a small tidal river is accessible even to small vessels only at certain states of the tide. Clay forms the bottom of the river, but it is covered over with shifting sands, the depth of which varies according to the flow and force of the currents and tides. The bar of sand at the junction of tide and current and the mouth of the river are therefore constantly changing. High water in neap-tides is usually from $8\frac{1}{2}$ feet to 9 feet deep, but sometimes only 8 feet; spring tides range from 12 feet to 14 feet. Nothing has been done for many years to improve the harbour. The tide flows up the Aln about a mile, and in high spring tides extends to Lesbury bridge. After leaving Lesbury the river flows nearly parallel with the coast, seeking an outlet into the sea, from which it is barred by a range of hills 100 feet in height, formed of clay, gravel, and sand; but which lessen in height southward of Alnmouth. Formerly the Aln found an outlet through a breach southward of the Church hill, which was then united to the Cheese hill and the town by a low ridge. Time after time the currents and tides acted on this ridge, and in 1806 broke through it, so that at high tides the Church hill was an island. When I was a boy the river still ran round the south end of the hill, and frequently have I passed dry-footed across from Alnmouth to the Church hill when the tide was back; ships lay at anchor, in a harbour, south westward of the hill, and were loaded with corn from a granary on the south side of the river. A heavy sea in * * * (†) deepened the breach, and since then the river has always run

[* Newcastle Journal, July 5, 1746.] [† Alnwick Mercury, Feb. 2, 1863.]

† Mr Dickson gives 1806 as the date of final disruption, “Hist. of Alnmouth,” p. 5.

through it, and the old channel has been blocked up by sand.

A few vessels still come to the port—about sixteen in a year—bringing for the Alnwick tradesmen wood from Gottenburgh, slates from Bangor, guano from London. As harbour dues, the Duke of Northumberland claims 5s from each vessel. Fishing is carried on, and employs about forty fishermen and sixteen cobsles, each carrying from 40 to 50 tons; but they go to no great distance, generally from two to three miles from the shore, though occasionally as far as the Dogger Bank. The fishing ground is from 20 to 25 fathoms deep. Cod, haddocks, ling, turbot, halibut, mackerel, skate, flat fish, coal fish, crabs, and lobsters are caught, most of which are sent to Liverpool, and other manufacturing places by rail. Cockles breed in the slake at the mouth of the river and are occasionally gathered for use in the town; but they are not obtained in sufficient numbers for sale. Attempts were made by Algernon, Duke of Northumberland, to form oyster and mussel beds; but they were unsuccessful; for the mud brought down by the river during floods destroyed both. Eight pounds yearly are paid for the whole of the fishing boats to the Duke of Northumberland; and he grants licenses to catch salmon in the sea, on payment yearly of one pound for each boat. As illustrative of the past history of the fishery, I give entire the following curious “Survey made, in 1649, by commissioners of the fishings of Alnmouth, late parcel of the possession of Charles Stuart, late King” :—

“All that the tith or tenth parte of the sea-fishe gained or caught and by nett or otherwise into one boate or coble now occupied and employed by Ephraim Armorer, of Alnmouth, gentleman, out of the water of Ayle or that parte belonging unto Aylmouth to the worth per annum of 13s 4d.

The same for William Armorer 13s 4d.

The same in one boat by Geo. Woode or Shephard, Edward Gray, Thomas Dunne, Patrick Woode.

Memorandum we finde that the royaltie of the fishing of Alemouth is now in the Trustees (*there were seven named in Act of Parliament*) and that they keepe as many boates or cobsles there and netts for the fishing as they please; that usually the owner of the Boates or Cobsles paid to the Crowne but a Noble a yeare for each Boate or Coble or the tenth parte of the fish they gained or caught out of the sea into eache boate, which the fishermen claim as a Custom, But they not making any due proof thereof and finding by examination on Oathe the tithe or tenthe parte of the Sea-fish gained or caught in one coble to be worth at least 13s 4d per annum, we value the same accordingly, and wee doe find that one William Eopping had 2 Cobsles there in occupation for the annual rente of 13s 4d, but the said Eopping is deade And three cobsles now occupied

by the aforesaid parties, but they have noe lease or grante for the same.

The present rente of the Fishings as aforesaid } 40s.
per annum

Given under our hands 18 Dec., 1649.

ROB. STAFFORD.

ROB. BOSTTON.

WILL. PEGLORDE.

BENJN. JONES "

As a place of trade the glory of Alnmouth has departed ; but it is becoming a favourite watering place in the summer and autumn, not only for the people of Alnwick but also for strangers from a distance. A considerable stretch of flat sands affords convenient and safe places for sea-bathing. Improvements have been made in the town ; some good houses have been built and others enlarged and beautified ; pure water has been brought from a distance into the dwelling houses, and improved sanitary arrangements have been introduced, a bath-house has been built, and gas works have been established. There are still wanted bathing machines, and several more lodging houses of a respectable class ; and if these were supplied Alnmouth might become one of the most desirable and fashionable watering places in the North of England.

Mark states that Alnmouth, in 1734, contained fifty-one families, and raised twenty-two voters in the election of a member of Parliament. The population then would be about 250. Since that time it has increased, but not greatly ; in 1811, it was 353 ; in 1821, 406 ; in 1831, 415 ; in 1841, 480 ; in 1861, 452 ; in 1871, 469 ; but the number of freeholders has diminished, for in 1826 only fourteen voted at the election for the county. During one hundred and thirty-seven years the population has increased 87 per cent, or less than two persons annually ; but during the last seventy years the increase was 33 per cent. or five persons in three years. Such is the very slow progress of our village population.

[Mr Tate gives an extract from the Rate Book for 1870, when the gross estimated rental of the Township was £1821 15s 4d, rateable value. He states that the free school, held in the chapel, had from 30 to 40 scholars ; and that there was also a school attached to the Methodist Chapel. The education is now under the control of a School Board.]

On August 15, 1779, considerable alarm was occasioned at

Alnmouth, and along the coast, by the incessant firing of guns at sea ; and fears were entertained of a landing being made by the French. It was ascertained, however, that an engagement was going on between two French privateers, one of 18 and the other of 24 6-pounder guns, and the *Content*, a man-of-war of 20 guns, commanded by Captain Roy ; which was in company with a Greenlandman, mounted with 14 six and four-pound guns. The Greenlander took no part in the battle, but ran in close to the shore. After a sharp engagement, which was visible to people congregated on the shore, and lasted for two hours, the *Content* beat off the Frenchmen, and compelled them to flee with all the sail they could make. While the engagement was in progress, two mounted cannons and a covered waggon were sent from Alnwick Castle to Alnmouth, accompanied by numbers of patriots determined with all their might to resist the landing of the French. An express was sent to Morpeth for the Huntingdon Militia, who immediately beat to arms ; but another express arrived with an account of the flight of the Frenchmen. One man was killed belonging to the *Content* and two were wounded. If the Greenlander had joined in the fray, it is supposed the French privateers would have been captured.* [On the 23rd September, Paul Jones appeared on the coast of Northumberland, to the great alarm of the inhabitants. He lingered a whole day on the coast. At 6 o'clock he appeared off Alnmouth, and at 8 took a brig. He then continued his course south.† Paul Jones, when off Alnmouth, fired a cannon shot at the old church then standing, but missed, the ball grazing on a small field east of Wooden Hall. It struck the ground and rose three times, and rent the east end of the hall from bottom to top. The ball is in the possession of Roger Buston, Esq., of Buston, and weighs 68lbs.]‡

Alnmouth Chapel was, in 1145, a dependency on Lesbury Church, and dedicated to St. Waleric ; but that its history reaches further back into Saxon times is proved by the discovery, in 1789, near to the ruins of the chapel, of the shaft of a Saxon cross. It is but a fragment, 2 feet 10 inches in height, consisting of two slabs of sandstone, covered with incised inscriptions, and sculptues in low relief. One face represents the crucifixion,

* Syke's Local Records, p. 316. Table-Book, ii., p. 261.

[† Newcastle Journal, Sep. 25, 1779.] [‡ Alnwick Mercury, Feb. 2, 1863.]

with our Lord extended on a cross, and the sun and moon beside the head; the thieves are at his side a little lower down, and at the foot are two of his executioners; and a much obliterated inscription is at the top. The other face is chiefly filled with knot or interlacing work; but with one line of an inscription in good preservation—"MYREDEH MEH wo"—that is, Myredeh me wrought. On one edge, besides knot work, there is an inscription in two, EADULFES TH, and another in one line, SAVL. The letters are chiefly Roman, with a few Saxon runes, and indicate an early age. Myredeh, probably an Irish name, was the sculptor; and the cross may have been erected to Eadulf, who usurped the throne of Northumberland, in 705, and after besieging Berchtford, the guardian of young King Osred, in Bamburgh, was repulsed and slain. The fragments are now in Alnwick Castle Museum.*

Alnmouth Chapel, as well as the parish church of Lesbury, was dependent on Alnwick Abbey, after 1145, for the supply of priests. Clarkson's Survey, made in 1567, furnishes important information of the ecclesiastical arrangements both before the Reformation, and for a few years subsequently. This document is given entire, with the spelling modernised:—

"There is one church all covered with lead for the most part there standing, upon the south part of the borough, and upon the water bank nigh the haven, with one parcel of ground, called the Church yard, and appertaining to the said church, wherein in ancient time there was always three priests and one clerk, two of the said priests, viz., the Master and his fellow, otherwise named the Vicar and his fellow, were found and had living of the Abbot and Convent of the late Monastery of Alnwick; and the said Vicar towards their said finding had the two tenements with all the land pertaining thereunto that did belong to the said Abbot and Convent in Aylmouth, without any rent paying, and also divers burgages therein, over and beside all manner of tithes of the said town and the tithe fish of his own coble, the tithe fish of all the rest of the cobles; only excepted the third priest and the clerk were found by the inhabitants of the said town, at which time the Service of God, by that means was maintained, the church and parishioners in their due order, where now there is only one priest and no clerk, who hath only the tithe of the said town, with other petty tithes thereof; and for the clerk's wages four-pence of every fire-house, and not well paid, as also the oblations due which do not amount to the sum of 53s 4d by the year. The Prince has

[* On this subject see 'Brand;' 'Archæologia;' Table-Book, vol. ii., p. 324, where there is a woodcut; Dickson's Hist. of Alnmouth, p. 15; Archæolog. Æliana, N. S., vol. i., p. 187, where are copies of the inscriptions; Hist. of Alnwick, vol. i., pp. 39, 40, with plate.]

letten all the rest by lease and receives the yearly rent thereof, so that if it be not by some means forseen after the death of the Vicar that is now, who has also one pension of the Prince, there will no priest of any understanding or knowledge take upon him the said cure and all for lack of living. Even so the church shall decay and the inhabitants there brought to nothing, and in the end the town wast, which plague God avoid."

Queen Elizabeth, in 1575, let by lease, the Alnmouth tithes to James Garston, and two tenements in Alnmouth, which belonged to her, to Robert Dormer; but subsequently the tithes of lamb and wool were sold to Sir H. Lindley.

Roger Spence, a canon of Alnwick Abbey, was curate of Alnmouth Chapel at the time of the Reformation; and out of the wreck of the Abbey property there was assigned to him a yearly pension of £5; and as curate he had also, according to the Ministers' account, "66s 8d, the rent of tithe of grain with all other tithes of the Chapel." He was present at the Archdeacon's Visitation in 1578, when Edward Spence was there as parish clerk; and he appears again in 1584, when Thomas Wilkinson and Quintinus Soulbye were churchwardens. In 1610, there were neither bible, homilies, surplice, nor pulpit; and the body of the chapel was in decay. I have not seen the name of any other curate; but at the Visitation of 1661, John Bayard and John Gardner are the old churchwardens, and John Bayard and Thomas Leang, the new churchwardens. It may be inferred from the following document that there was a curate in 1663, though his name is not mentioned:—

"Alnmouth Terrier.—Alnmouth, Dec. 12, circa 1663. To certify we have no Terrier, nor we have no glebe land except one but of land which payeth twelve pence by year. There is not a house belonging to the Curate, only the Easter reckonings, tithe lamb and wool, geese and pigs, and tithe hay in some places, which will not amount above five pounds by year.

THOMAS BURLETSON, } Old
WILLIAM WALKER, } Churchwardens."

With the exception of a little of the foundation, the ancient chapel of Alnmouth, which stood southward of the town, on a hill of gravel and sand whose base is washed by the river, has disappeared; but we can now form an opinion of it from slight notices written in last century, and from a drawing of it in Grose's *Antiquities*, made in the year 1783. Mark, in his *Survey*, 1734, says—"the church is now quite ruined and the covering entirely gone, there having been no service except burying the dead for many years." The drawing in 1783, shews the place to

have been cruciform; and the structure to have been plain and with little ornament; the windows were narrow and round-headed; a door too with a round head is seen in the north corner of the west gable, attached to which is a small low building, which, however, may not be part of the original structure; though similar appendages are seen in the old chapels of Ebb's Nook and the Farne. This chapel may therefore be of an early Norman age. Wanton spoliation hastened its destruction; John Carr, gentleman, Ralph Carr, gentleman, and Edward Shepherd were presented at the Archdeacon's Court in 1662, for taking away the leads, the bells, and stones from Alnmouth Church; and Maria Moore, for taking down all the lead of the chancel and other ornaments of the church. The principal bell was removed from Alnmouth to Shawdon, about 1714, by Mr Brown, who was owner of Shawdon; and the principal owner of property in Alnmouth; it was used as the dinner bell at Shawdon; but when that house was destroyed by fire on May 27th, 1849, the bell was melted.*

After this, the chapel, uncared for and unprotected by man, was left to its fate, the sport of winds and waves; it stood a solitary roofless ruin, near the edge of a cliff against which high tides and stormy waves broke with ruthless violence, which detached and carried away portions, time after time, till the worn and wasted walls, tottering on the brink, were blown down by a great gale on the Christmas day of 1806.

The Church-yard was used as a burial place for the inhabitants of Alnmouth till the beginning of the present century. Very few tomb-stones remain; the oldest inscriptions are the following:—

Here lieth the body of Robert Long, who departed this
life the 2d of March, 1726, aged 44 years.

Here lieth the body of Robert Richardson, the son of
Robert Richardson, mariner, who departed this life in October
the 24 day, aged 22 years, 1747.

Here lieth the Body of Thomas Richardson, son of Robert
Richardson, who departed this life the month February
the 11 day, aged 34 years, 1748.

[According to Mr Dickson's MS. in my copy of the History of

[* It is called "the bell of the turret clock."—Latimer's Local Records, p. 261.]

Alnmouth:—"In a few years, from the encroachments of the river and tide, the Church Hill would, in all probability, have disappeared, had it not been for Algernon, Duke of Northumberland, who caused a strong retaining wall to be erected around the greater part of it, where the sea had any influence. Thus it has not only been saved from the encroachments of the ocean, but it is partly the cause of the growth of bents and increasing the sand accumulating to a considerable extent, between the Church Hill and the sea."]

After 1663, we find no reference to the Curate of Alnmouth; and during nearly two centuries no religious service was celebrated there according to the forms of the Church of England. To supply this want, a granary belonging to the Duke of Northumberland was fitted up as a chapel, licensed by the Bishop of Durham, and opened for public worship on March 30th, 1859. The minister has a salary of £100, which is raised by subscriptions and collections, and the use of a house and garden, granted by the Duke of Northumberland.

[On the 7th November, 1876, a new church was consecrated and formally opened. The old one on the opposite side of the river, which it is intended to replace, had fallen into decay. It is designed to accommodate 120 people or more. It was erected by public subscription, at a cost of upwards £1,400; Major Browne, of Lesbury, who gave £500 towards its erection, being the largest subscriber. The site was given by the Duke of Northumberland. The plans were prepared and the work executed by Mr Matthew Thompson, of Newcastle-on-Tyne. It was dedicated to St. John the Baptist; as the old chapel on the authority of Baker's *Liber Regis*, appears also to have been; although Mr Tate makes no allusion to this; nor is it known how the one saint superseded the other as spiritual patron. In the "*Archæologia*" of date 1789, the chapel is said to be commonly called "*Wooden's Church*;" and Mr Dickson conceived that this might be Woden, the Saxon divinity. But I think it was merely so named because the people of the township of Wolden or Wooden, for convenience, worshipped there; Mr D. having further misunderstood the meaning of the word Wolden, or Walden, which has nothing to do with Woden.* The date of the Methodist Chapel, I do not know; but I find from the Rev.

* See Ber. Club's Proc. vol. vii., p. 460.

John Wesley's Journal, p. 274, that on the 4th of August, 1748, he visited Alemouth.]

ADDITIONAL NOTICES.

By charter of John de Vesey, the brethren of Holne Abbey were at liberty for their support, in his burgh of Alnmouth, annually to purchase a last of herrings, at the same market and in the same manner as the burgesses bought, without any hindrance or gainsaying of the bailiffs or burgesses, at the herring-fishing season, to wit, at their own convenience. They were, besides, permitted to buy other fishes necessary for their subsistence, and all other vendables procurable in the said burgh, when required, and this when it appeared to them most suitable. (Cart. Conv. de Holne. Proc. Arch. Inst. 1852, vol. ii., app., p. LXX., &c.) This was repeatedly confirmed by other over-lords.

Some additional facts not included in Mr Tate's MS., I have supplied within brackets. What I have further collected of the annals of Alnmouth may be placed here. In Bishop Gibson's edition of Camden's Britannia, London, 1753, p. 1085 (reference being made to Phil. Trans, No. 330), in mentioning that there had been disclosed at Corbridge "great numbers or strata of teeth and bones of a very extraordinary size;" the Bishop goes on to say, "the like bones are reported to have been frequently discovered on the shore near Alnmouth, in this county; all of them at a greater depth in the ground than they can well be imagined ever to have been buried." It is remarkable that in recent times, we have no news of this osseous deposit. Alnmouth has not been without its alarms and disasters, incidental to its littoral situation, and the perils of a sea-faring life. On the 6th of July, 1744, Captain Turner, of the *Thomas and Margaret*, of Sunderland, and a brigantine from Berwick, laden with corn, were taken by a privateer off Alemouth; Capt. Turner was ransomed for £225, and the brig was sent into Dunkirk. The Sunderland vessel stood an engagement of five hours, commencing in the evening, and was taken next morning about three miles from Holy Island. Captain Turner's vessel was thrice boarded; and having cleared the deck twice, after killing 26 of the Frenchmen, he was at last obliged to strike, when his mate was shot for standing out so long. He had 6 men, 3 boys, and 4 guns; and was

himself shot through the hand. The privateer had 16 carriage-guns and 120 men.* April 4, 1747, a French privateer of 8 carriage-guns, took a Berwick salmon sloop off Alemouth, and ransomed her for 200 and odd pounds, and thereafter forced a snow on shore, bound for Philadelphia with stores, near that place.† On August 22, 1756, a French privateer—"a long dogger that appeared to be full of men,"—took a fishing-smack, belonging to Berwick, freighted with salmon, off Alemouth, "in sight of a great number of the inhabitants."‡ April 7, 1765, three country people were drowned at the mouth of the river, while so foolhardy as to attempt to cross, against both wind and tide.§ Nov. 1, 1765, during a great storm at sea of several days' continuance, two cobs with six men in them, were sunk at sea off Alnmouth, and two men perished in another boat, but the third man brought the two deceased ashore.|| In the beginning of Dec. 1785, a most violent and destructive storm ravaged the coast of Northumberland, and strewed the shore with wrecks, and vessels a-ground. Between Alnmouth and Coquet Island, 11 vessels lay on the beach (whose crews were, however, preserved), besides those that had foundered, and been stoven to pieces among the rocks; and 15 other ships were ashore northward of Alnmouth.¶ On the 2nd of January, 1791, Robert Henderson, of Stockton, gentleman, usually called *the Sailing Quaker*, while attempting to take the harbour of Alnmouth, in his sailing boat, was capsized and drowned, along with his man, in the sight of the whole town. He put to sea at Newbigging contrary to the remonstrances of the fishermen.** Among the advertisements of amusements in the Newcastle papers, between 1724 and 1740, horse-races were held at Alnmouth.†† Smuggling was formerly prosecuted on this coast with boldness, but not always, as it would appear, with unvarying success. In the *Universal Magazine* (vol. LVII., p. 276), under date Nov. 21, 1775, we have this item of intelligence: "Saturday se'night was lodged in the King's warehouse at Alnmouth, 80 casks, containing 300 gallons of spirits, great part of which was sunk in the sea at Stinking-hole [Newton-by-the-Sea], and taken up and seized by Mr Banner, riding-

* Newcastle Journal and Courant, July 14, 1744.

† Newcastle Courant, April 11, 1744.

‡ Newcastle Newspapers.

§ Table Book, vol. ii., p. 131.

|| Ib. p. 138.

¶ Ib. p. 303.

** Brewster's Stockton.

†† Arch. *Æliana*, N. S., vol. iv., p. 233.

officer of the customs at Embleton, in the port of Berwick." There were also casualties on land. Nov. 3, 1777, the stackyard of Foxton Hall, near Alnmouth, was burned down, not without suspicions of incendiarism; upwards of 20 stacks of corn, mostly wheat, being destroyed in the conflagration.* During a hurricane, 9th Jan., 1839, half of the houses in the town were unroofed.† Among modern improvements, we find that on April 24, 1857, an elegant bridge on the Aln, at Alnmouth, erected at a cost of £1,900, was opened for traffic.‡ At Foxton Hall, which he rented from the Duke of Northumberland, resided during his latter years, Mr Thomas Bennett, a man who held a high position as a land agent, and who, for 39 years, had the management of the Duke of Bedford's estates, and in this responsible situation earned the title of being "one of the best men of Bedfordshire." Mr Bennett was the son of a wine merchant in the then little old borough of Morpeth, being born there in 1803. In early life he became a farm pupil with William Jobson, of Chillingham Newton, who was one of the earliest improvers of Shorthorns. After remaining with Mr Jobson for some years, Mr Bennett became the tenant of Hebburn Bell. John, Duke of Bedford, happened at that time to be on a visit to Lord Grey, at Howick, whither he had gone for the express purpose of seeing the farming of Tweedside. His Grace expressed a wish to have a report of what he had seen, and Mr John Grey, of Milfield, acceded to the request. From the circumstance of the Duke's visit may be dated the removal of Mr Bennett to Woburn; for his Grace was impressed with what he saw of Tweedside arrangements, and requested Mr Grey to recommend to him a gentleman who would undertake the Bedfordshire agency, and he recommended Mr Bennett. Mr Bennett had, for some years, the management of the Thorney and Wansworth estates, as well as Dorsetshire, in conjunction with his work in Beds and Bucks. He retired in 1868, and was succeeded by Mr Christopher Stephenson, the present agent. Mr Bennett died at Foxton Hall, on the 11th, aged 73 years, and was buried at Lesbury, on the 15th January, 1877. Mr Bennett enjoyed a substantial pension, granted by the late Duke of Bedford, to the day of his death. Mr Bennett was a man of large views in the management of the

* Table-Book, vol. ii., p. 254.

† Ibid. vol. v., p. 103.

‡ Latimer's Local Records, p. 396.

estates under his charge, he advocated long and liberal leases, the thorough drainage of land, and the erection of well-arranged farm buildings, and commodious cottages. He identified himself with every movement in Bedfordshire, which had for its object the benefit of agriculture. He advocated very strongly the erection of the county school; one of the last acts of his life being a gift of £600, to be invested for scholarships; and he also left a legacy of £1,000 to that institution.

In 1551-2, the inhabitants of Alnmouth, Lesbury, and Hawk-hill, participated with the people of Alnwick, and its vicinity, in maintaining their proportion of the Border watches. It was ordained that "from *Chrystofer Armorers* to *Sheple-gate* (Shipley-gate) was to be watched nightly with fourteen men of the inhabitants of *Longhoutton*, *Elmouthe*, *Lesberry*, *Aukle*, *Denyke*, *Broxfeld*, *Ekle* (Heckley), *Berne yardes*, *Belyzate*, *Cany-gate*, and *Walker-gate*." The setters and searches of these watches were, "the keepers of the west parks of *Anwyke*, and *Hall* (Hulne)-*park*." *Bylton* and *Wodden* were grouped separately with "*Whyttell*, *Shelbottell*, *Over-boston*, *Nether-boston-grange*, and *Berling*," to watch from "*Hodge-croft* to *Rong-hole*;" the setters and searchers being "*Rughle* and *Snepe-house*."*—J. H.

* Nicolson's *Border Laws*, pp. 197, 198.

Ornithological Notes. By VALENTINE KNIGHT, Esq., Kelso.

HOODED CROW (*Corvus Cornix*).—On the 28th of May last, between Bamburgh and Warren Mills, on the links bordering the coast, I twice started a Hooded Crow, the bird rising on both occasions within easy shot. This is considerably later than the usual time of its vernal migration; indeed Col. Montagu says it "retires northward to breed in the beginning of April;" Stevenson says "it leaves by the end of March or beginning of April;" possibly, as in a few isolated instances on record, this bird may have picked up a black mate, either a variety of its own, or the allied species *Corvus Corone*, which some ornithologists say it interbreeds with. Such is the similarity in appearance in these two birds—colour excepted, and in some respect in their habits—

that the assertion as to their inter-breeding is difficult to disprove; but on the other hand, those who hold the theory that they are one and the same species, or "races" of one species—whatever that may signify in the way of a distinction—and do inter-breed, have at least one very great difficulty to face, viz., that of the *migration* of the Hooded Crow, which species, as regards England at least, is migratory almost to a bird, arriving on the English coasts in large numbers in autumn, and leaving again northwards in the spring to breed. If they are mere *varieties* of one species, how comes it that the black variety remains throughout the year and breeds all over England, there being no perceptible diminution in their numbers, so far as can be noticed, at any season of the year? Why, also, do we see the Carrion Crow *in pairs* like its congener the Raven, which is generally seen either singly or in pairs? Gilbert White says "Crows go in pairs all the year round;" Montagu also says "These birds (*Corvus Corone*) keep in pairs all the year, seldom congregating but to regale on some carcase, or in winter to roost;" whilst, on the other hand, the Hooded Crow, during its sojourn with us, habitually feeds and roosts in large numbers, never in pairs; nay, have not the "Twa Corbies" figured in verse? May it not rather be that these so called Carrion Crows, inter-breeding with the Hooded, are merely what some call them, viz.:—"black varieties" of the Hooded, and not Carrion Crows at all? Be this as it may, it seems that in England we have no perceptible difference at any time of the year in the numbers of the Carrion Crow, *all apparently remaining* to breed; whilst, on the other hand, we have a very large immigration of the Hooded species in the autumn, going in flocks and not in pairs during their sojourn, and *all leaving* to breed in the north in the spring; the few isolated instances in England to the contrary prove nothing. It is more than probable that the bird I saw near Bamburgh, on the 28th of May, and the few others that have been known to stay and rest, have been birds wounded in the winter, and not sufficiently recovered to migrate northwards at the usual time.

Rook (*Corvus frugilegus*).—A very extraordinary specimen of the Rook was shot on the 18th of May last, at Lowlynn, Northumberland, in the rookery near the house, and kindly sent to me by my brother, Henry Gregson, Esq. Description of this bird,

as nearly as I can give it, is as follows :—wings, tail, and all the upper parts a deep ash brown, the back feathers edged with paler colour; head and neck paler, but slightly clouded with dark brown; the hairy feathers at base of bill very dark brown; the remainder of plumage (or the rump and under parts) a few degrees paler of the same colour; legs, toes, and claws pale brown; beak, pale brownish horn; iris, lead colour. The nearest approach to the colour of this remarkable bird that I have in my collection, is a brown specimen of the Common Buzzard, with a dash of ash colour. I have also a cream-coloured specimen of the Rook which was shot some years ago at Kyloe Wood, about three miles from Lowlynn. I need scarcely add that both birds are in their first or nest plumage. Yarrell mentions a variety “of a light ash colour, most beautifully mottled all over with black, and the quill and tail feathers elegantly barred;” this bird, on its moulting, changed to a jet black Rook; Henry Stevenson, in his “Birds of Norfolk,” seemingly alludes to this same bird, as also does Morris. Mr Stevenson, however, in the same page (277) of his work mentions, as in the Norwich Museum, a Rook which he describes as a “singularly brown specimen.” I think it most probable that most of such varieties, if they escaped the gun, would change to the black plumage at the next moult.

RINGED PLOVER (*Charadrius Hiaticula*).—On frequent occasions, this year and last, during the breeding season, and I may say throughout the summer, I have seen several pairs of the Ringed Plover by the banks of the Teviot, about half way between Kelso and Jedburgh, and from the noisy and anxious manner of the birds and the nature of the ground near the water side, I am satisfied they nest there regularly, notwithstanding the distance from the coast, which must be 25 or 26 miles as the crow flies.

SABINE'S SNIPE (*Scolopax Sabini*), or COMMON SNIPE (*Scolopax Gallinago*)?—I have in my collection a Snipe with very remarkably dark-red plumage. It was shot on the 1st January, 1875, by a man named James Speedy, at the mouth of a burn entering the sea near the Marshall Meadows Estate, Berwickshire. Seeing the bird in a shop window in Berwick, and believing it at once to be a variety of *Scolopax Sabini*, I traced it to the owner and purchased it. It was very unfortunate that the bird was “set up” (I won't call it preserved) before I saw it, as it had been very

roughly handled in the partial skinning which it got, and consequently rather injured—the legs varnished, &c. I took some measurements, such as length of bill, $2\frac{3}{8}$ in., tarsus $1\frac{1}{2}$ in., but these, I take it, have little value in determining the species, considering the size, weight, &c., of the Common Snipe vary so much. I forwarded the bird to Mr Charles Gordon, curator of the Dover Museum, for re-preservation, and he found that considerable portions of the bird had not been removed, such as the whole of the back-bone, the neck, all the flesh of the wings, &c. He carefully counted the tail feathers, and found fourteen, as in the Common Snipe; however, on referring to the “Birds of Norfolk,” by Mr Stevenson, I find that many specimens of the *Scolopax Sabini* have been found with the same number. Mr Morris does not state from what specimen his figure of the Sabine was taken, but it gives one the idea of a paler bird than Vigors’s specimen, figured by Yarrell, Bewick, and others. The bird I am now describing has a very remarkable resemblance to Morris’s bird, with the exception of a little very dirty white—if I can call it white—*between the legs*, the thigh feathers down to the leg being *mottled brown*, like Morris’s specimen. Now, in the Common Snipe, and in all waders with light underparts, the plumage gets purer white as it approaches and ends at the legs. Taking the colour of this bird as a whole, and comparing it alongside a Woodcock, it is the darker of the two, the breast being rather spotted, while that of the Woodcock is barred. I may add that soon after obtaining it, I let Mr Hancock see it, and he told me that he considered it “a very red variety of the Common Snipe, that he had never seen one so red, and nearly approaching to Sabine;” and added, “but then I consider Sabine’s Snipe nothing more than a variety of the Common Snipe.” No doubt, along with Mr Hancock, many ornithologists of the present day consider Sabine’s nothing more than a melanoid variety of *S. Gallinago*; and on this point Mr Stevenson says, “although this opinion unquestionably gains ground,—I consider that with some future Selby or Yarrell must rest the responsibility of removing it from the ‘list’ of British Birds.” Mr Gray, in his “Birds of the West of Scotland,” mentions a bird that came under his notice at Inverness, in February, 1869, and which he calls the Russet Snipe, *S. russata*; I have never seen this bird figured, or in collections, but rather fancy it is larger than either the *Gallinago*

or *Sabini*, but of this I am not certain. Should the bird above described be a veritable *S. Sabini*, or a variety of it, I believe it is the first specimen obtained in Scotland. And in concluding this notice, I may call attention to a remark of Mr Stevenson's, in his highly interesting account; "Not the least singular feature in the history of this bird, is the fact that hitherto it has not been met with out of the British Islands, a circumstance equally remarkable whether the bird is regarded as a melanism of *S. Gallinago*, or as a new and distinct species."

GREAT SNIPE (*Scolopax major*).—A fine specimen of the "Solitary" or "Double" Snipe was shot on the 31st ult., at Warrenton Moor, near Belford, Northumberland, by W. L. Miller, Esq., of Berwick-on-Tweed. His setter pointed it amongst some "benty grass, and it lay till he was within three yards—its flight was low and very heavy." This bird was excessively fat—as is almost always the case with the specimens shot on their arrival—and weighed $8\frac{3}{4}$ ounces. It was kindly presented to me by Mr Miller, and forms an interesting and valuable addition to my collection. This species has been procured frequently before in the same district—once at Twizell, by the late Mr Selby.

GREENSHANK (*Totanus glottis*).—On the 2nd October last, I shot a very fine specimen, an adult female, on Beal salt marshes; it was in company with three others. On the following day, on the same ground, I shot a second, an immature female, and, strange to say, this also was in company with three others. I afterwards saw several single birds, one of which rose out of one of the numerous small ditches, and almost from under my feet; however, having shot two, I stayed my hand, not wishing to destroy more of such a scarce species. From the numbers I have seen the last two seasons, I cannot help thinking the Greenshank by no means such a rare visitant to the Northumberland coast, as by some supposed; in fact I believe that from the middle or end of August to the end of October, it is to be met with any day on Holy Island, or on the mainland opposite, if looked for.

LITTLE GREBE (*Podiceps minor*).—A pair of these birds bred last summer (as well as the previous one) on the banks of the Teviot, in the neighbourhood of old Roxburgh Mill. I have watched the interesting little family on frequent occasions up to the end of November, and twice was fortunate enough to witness

what I never saw before, viz. :—a Little Grebe on the wing. On the second occasion, I happened to be watching them through a glass, when one rose off the water, and came past within easy shot, flying rapidly, twelve or fifteen feet above the surface, with the legs carried straight out like the other divers; it continued its flight for 150 yards or so, and then dropped again in the pool. Selby says, in reference to the flight of these birds, “they are by no means destitute of this power, but can skim near to the surface of the water by a rapid action of the wings, and, as Montagu observes, are frequently seen to do so during the pairing season when the males are in pursuit of the other sex.” I was certainly surprised to see these birds take wing without any apparent reason, as if rather out of mere restlessness, and flying seemingly with as great ease as any of the duck tribe; for, when scared in any way, they usually make their escape by diving.

On Stamfordham Church. By the Rev. J. F. BIGGE, M.A.,
Stamfordham.

The old name of this village is Stannerton, that is the *Ton*, the common Anglo-Saxon suffix to so many places, and *Stanner* a Stoney ford—it is now called Stamfordham. *Stam* a corruption of *Stanner*, *ford* to explain the meaning, and the common suffix *ham*. It lies in a centre twelve miles from Newcastle, Morpeth, and Hexham. It is situated on the north side of the river Pont, in the Township of Heugh, formerly called Hoghe, which village lies one mile north of this place. With the exception of a few enclosures, all the Township had been an open Common till it was divided in 1727. In the centre of this village, on the north side, there is a high brick house, behind which is a bowling green, where, it is stated, the ill-fated Lord Derwentwater used to come and play at bowls; but probably also for another purpose, which eventually led him to his ruin.

At the west end of the village stands the Church, dedicated to St. Mary the Virgin, and surrounded by trees on the south and east sides. These trees were planted by Dr Dockwray. The following verses were made by a poetical schoolmaster of Inghoe, when he saw them the first Sunday after they were planted:—

“To ornament his feathered nest,
And screen him from the northern wind,
A row of trees he proudly placed,
In time will put the parish blind.”

The style of architecture is early English, or first pointed, and the present Church was probably built about 1220, though there must have been a more ancient one, for when it was rebuilt many carved stones of an earlier date were found built up in the walls; among others part of the shaft of a Saxon Cross, which is now in the Dean and Chapter Library in Durham. The Church consists of a nave, with north and south aisles, and is 66 feet long, and 37 feet wide. The chancel is of great beauty, 42 feet long by 18 wide. At the west end there is a large square massive tower, 40 feet high, with one bell, a modern one made in Newcastle.

In 1245, Nicholas, Bishop of Durham, appropriated to Hexham, the tithes of East Matfen, Nesbit, *Ulkeston* (now Ouston), Hawkwell, and Bitchfield, townships in the parish; a payment of 50 marks a year to be made out of them to the Bishops of Durham.* In the 33d of Ed. I., the King granted the advowson to the Priory, having recovered it in a Court of Law against the Bishop of Durham, and Ed. II. confirmed his father's gift. In 1340, Bishop Bury, in a time of emergency, reduced the annual payment to himself out of the living from 50 to 40 marks. This Vicarage was usually held by a Canon of Hexham.

In the Foundation Charter of the Hospital and Chapel of St. Mary's, in Newcastle, Richard, parson of Stamfordham, was a witness to Aselacke, of Killinghowes, about the year 1190.† Hugo de Stambrig was rector 1245, Robert Avenel 1260, and Richard de Derlyngton 1354, Vicar Alex. de Ulkeston 1326, Will. de Derlyngton 1351, Richard Holmeswell 1385, John Lange 1416, John Golen 1501, John Hog —, Arthur Shaftowe 1547.

* Hodgson Hist. vol. ii., part iii., 105.

[† “Dno Hug de Normanvill persona de Stanfordham,” is a witness to a Composition made between the Abbacy of Melrose and the Baptismal Church of Makerston, about the tithes of Maxton and Morhus, by which the Melrose monks agree to pay annually at Whitsuntide to the church of Makerston, four silver marks “pro bono pacis.” The date 1227 occurs in the deed. The other two witnesses are Master Hugo, Archdeacon of Glasgow, and Master William, Archdeacon of Dunkeld. (“Liber de Melros,” No. 246). “Hug. de Normanville persona de Stamfordham” also witnesses a settlement of some disputed claims to lands between the monks and John, the son

(At the Chancellor's Visitation held January, 1578, it is stated that the vicar Shaftowe was then in prison. The Will made 30 Jan. 1581, and the Inventorie of the goods and cattle of Mr Arthur Shaftoe, Clarke and Vicar of S, are printed by the Surtees Soc., 1850, *vide* Eccl. Proceedings of Bishop Barnes). Francis Coniers 1583, Robert Gower 1610, Robert Greve Laughe 1615, John Hinde 1618, John Marson 1618, William Swan 1619, Ralph Fenwick 1662, Ed. Fenwick — Ambrose Fenwick 1719, James Baker 1732. Mackenzie, *His. of Northd.*, says of him, "He was a very worthy, but very eccentric man. He was a great agriculturist, and was called the 'Draining Doctor.' He kept no servant, but had his meals from a public-house. He never changed his coat till in tatters. He resigned his living on his succeeding to the family estate of Pen, in Buckinghamshire." He was succeeded in 1761 by Thomas Dockwray, who was a Fellow of St. John's College, Cambridge, and was Lecturer in St. Nicholas' Church, Newcastle, and died 1783. After his death no vicar ever resided here till I was appointed in 1847. He was succeeded by T. L. O'Beirne, who was inducted by proxy by the Vicar of Kirkharle. He never was in the parish except one morning, and after holding it for two years, he resigned it for the Bishopric of Meath. The mode in which he obtained this living is well told in the *Life of Rev. R. H. Barham*, vol. ii., p. 171. "Diary May 11, 1844.—Dined at Sir Thomas Wilde's. Hobhouse told a story of the Rev. (commonly called Parson) O'Beirne, which he had from old Richard B. Sheridan. Sheridan had been dining with O'Beirne, and it being Saturday, the host was anxious to bring the sitting to an earlier termination than usual, as he had no sermon ready for next day. Sheridan pleaded hard for another bottle, 'Then you must write a sermon for me,' was O'Beirne's answer, which Sheridan undertook to do. There was a certain Mr —, a neighbouring squire, who was proverbial for grinding

of Philip de Maxton; John de Normanville, the superior lord having recompensed him with an equivalent in the territory of Newton. The co-signatories are Bernard de Hauden, Gregory de Rutherford, Richard de Hetun, Elgi Prudfot, and others. (*Ibid.* No. 253). The Normanvilles were then lords of Maxton, and liberal benefactors of Melrose Abbey. In 1259, Lord Walleran de Normanville was buried in the Abbey. ("Chron. of Melrose," under date). William de Normanville was rector of the church of Maxton in 1250 ("Lib. de Melros," No. 338).—J. H.]

the poor, and had recently prosecuted some of the labourers in the parish for stealing turnips. Sheridan's sermon, which, true to his word, he produced in the morning, was a regular attack upon this gentleman. It was filled with all sorts of pretended quotations from St. Paul and the Fathers; sentences denouncing illiberality, tyranny, and oppression of the poor, some of them referring particularly to the especial sinfulness of prosecutions for stealing turnips. Mr O'Beirne, who had no time to read over the composition before morning prayers, commenced his discourse, and went on till he fairly drove the indignant squire out of the church. The latter, indeed, was so savage at the personalities, that he made a formal complaint to the Bishop of the Diocese. 'And how did the matter end' asked Hobhouse. 'Oh, just as such a thing should end' said Sheridan, 'O'Beirne got a better living.' This was the Vicarage of Stamfordham.

He was succeeded by Edward Matt. Tharlow, who died in 1847, and was succeeded by myself.

In 1848, the Church had fallen into a sad state of decay. It was entirely taken down under the direction of Mr Benjamin Ferry, the architect, all the stones of the pillars and arches where old, were numbered and replaced when cleaned, in their former positions. The tower, the chancel arch, which is very peculiar in form, being almost of the shape of a horse's shoe, and a considerable portion of the south wall of the chancel were left standing, and were not disturbed.

On entering the porch some ancient grave crosses are inserted in the walls, which were found during the restoration of the Church, and are thus preserved from the destroying influence of frost and rain.

The two western pillars have ornamental caps, in imitation probably of the Pillars Boaz and Jachin at the entrance of the Porch of Solomon's temple, vide 1 Kings, 7, 21. The chancel is far the most striking part of the church; at the east end are three very long-lancet windows, that in the centre being the longest. Within the altar rail, in a niche in the north wall, is an effigy of a priest in his robes; in a similar niche, within an arch on the south wall, is the figure of a crossed legged knight in armour, and on his shield are six marlets, which proves him to have been one of the illustrious house of Fenwick. Fenwick Tower is one mile

and a quarter west of this village; when this old tower was pulled down in 1775, 226 gold nobles of Edward III., Richard II., and one of David II. of Scotland, were found. Near the vestry is the mutilated figure of a knight in armour; his legs, though broken, I saw in 1845, but they had evidently been bruised up to sand the floor. This is a remarkable effigy; the knight is resting his head on a tilting helmet, the crest on front had been a lion, the head is gone, but the plume, which is on the front of the helmet, was said by the late Rev. Charles H. Hartshorne, Rector of Holdenby, a person most learned on this subject, to be unique certainly in England, if not in Europe. This is supposed to be the figure of Sir John de Felton, who was lord of the manor of Matfen. He was Sheriff of Northumberland in 1390, in the 14th year of the reign of Richard II. He is mentioned by Froissart as being at the battle of Otterburn, which was fought in August, 1388, and he says, "he was deputed by the King, August 20, 1388, to go with Nicholas Dagworth and Gerard Heron to the Exchequer of the King of Scotland, according to articles of a truce concluded between England and France, and forthwith to certify the King what they should in the premises."* He died 1402. On the south chancel wall is a monument to Dr Dockwray, who died December 4, 1783, having held the living 23 years. On the same wall is a coat of arms and monument to the family of Dixon, of Inghoe. This monument was painted and emblazoned a few years ago at the cost of the Rev. Dixon Brown, of Unthank Hall. There is only one painted window in the Church, beautifully executed by Messrs Clayton & Bell, London, and placed there to the memory of two of my daughters who died in 1868.

At the east end of the south aisle is a representation of our Lord on the Cross, with a dove above, and on one side is a figure of the Virgin Mary and St. Andrew, and on the other St. John and an Archbishop. This is a very rude piece of sculpture, and was found lying below the old floor, and had no doubt been a reredos to an altar in a chantry chapel. The remains of the parclose of this chapel and a piscina are still there. This part of the Church in

* *Vide* Rot. Scot, ii., 98, for a fuller account of their mission. The date given there is 3d July, 1389; and their object was to obtain the oath of the King of Scots to the articles of truce and abstinence from hostilities.—J. H.

bygone days was called "Nesbit Nook." In this nook now stands a very excellent organ, built by Forster and Andrews, of Hull, and placed there by public subscription in 1873.

On the south wall of the nave is a monument to Mr John Akinside, whose family were owners of land in Hawkwell, in 1663. On the west wall there is a monument to Mr George Salkeld, who was master of the Free School here for 52 years, and died in 1745, aged 72; and another to the memory of the Rev. Richard Baxter, who was curate of the parish for 46 years, and master of the Free School for 49 years; he died 1808, aged 78. On the north wall there is a Latin inscription to the memory of some members of the Scott family, formerly of Stokoe, but who for some time resided as medical practitioners in Stamfordham. Among others is mentioned Gul. Scott, M.D., ob. Nov. 10, 1802, æt 69, "Vir eruditissimus et accoucheur celeberrimus: ex familia de Buccleugh," &c. I was informed by the late Rev. Dr Raine, rector of Meldon, that Dr Scott was surgeon to the Northumberland Militia, and at Alnwick he placed on his door a very large brass plate, and on it was inscribed, "Dr Scott, man-midwife to the Northumberland Militia."

At the west end of the north aisle is a large stone altar-shaped monument "to the memory of John Swinburne of Blackheddon, and Marie, his wife, and son of Thomas Swinburne of Capheaton, and the sole daughter of Thomas Collingwood of Eslington; they left four daughters." On the edge of the stone slab is this rhyme:—

"A loving wife and mother dear, such a one
She was who now lieth here."—1627.

This monument is about 12 feet high, and is very rudely carved, and is very similar in character to one in Mitford Church to the memory of a Bertram, which bears this inscription:—

"Bartram to vs so devtifvl a sonne,
If more were fit it shold for the be done."

The ornaments on both are similar, and very probably have been designed and executed by the same hand.

The Vicarage lies on the south side of the Church. In 1460, the vicar lived in the "Turris de Stanwardham." Over the south entrance to the house is a coat of arms, on the dexter side are those of Dr Dockwray, and on the sinister those of his wife, who was an Ellison, and below

"Ædes hasce labentes refecit, Thos. Dockwray, 1762."

There was a Chapel at Ryal, which is fast falling into ruins. It was disused when Matten Church was built in 1845. There was also a Chapel at Inghoe, in this parish, of which not a vestige now remains, but the curate was summonsed to appear at the visitation held by the Chancellor of the Diocese, at Newcastle, Jan. 22, 1582, in the time of Bishop Barnes, and neither he nor the churchwardens appeared, and in Feb. 14, 1583, the Chapel was vacant. Tradition points out the site of another chapel in the Heugh village. I have purposely abstained from going into any history of the parish in general, or in describing any of its antiquities, or its geological formation, or objects of Natural History, but have confined my remarks entirely to the Church and its history.

On a Collection of Willows, presented to the Berwick Museum. By Mr A. BROTHERSTON, Kelso.

As I take a great interest in, and have devoted much time and attention to the large and important family of the Willows, I have much pleasure in presenting a set of mounted specimens to the Berwick Museum. Being a very critical genus of plants, I venture to think that they may prove interesting from having been chiefly gathered in the district, *i. e.*, Roxburgh, Berwick, Selkirk, and Northumberland, and also that they may be useful for purposes of comparison. In all doubtful and critical cases, examples have been submitted to the best authorities on the subject for their opinion—including Mr J. G. Baker, Dr Boswell (late Syme), and the Rev. J. E. Leefe.

The Eastern Borders are particularly rich in Willows, especially the lowland sorts; in fact we have representatives of all the species, only a few varieties being wanting. On the other hand we have none of the Alpine kinds, although from the altitude of the Cheviots we might have expected to find some of them there. Owing to the draining of the land, it is probable that at no very distant date, some of the most interesting will have disappeared from the district, especially the bog-loving species. *S. tenuifolia* is recorded in the "Eastern Borders" as growing plentifully in

Learmouth bogs. These bogs having been drained since, has had the effect of exterminating *S. tenuifolia* and several other rare and interesting plants from the locality.

In a highly cultivated district like this, there is some difficulty, indeed it is impossible to decide with certainty, which are truly native, and which are introduced species. But there can be no doubt, whatever, about those growing in such places as Primside bog, Lurgie Loch, &c. Most of the larger growing kinds, although apparently planted where they now are, would, I believe, be wild in the district before the land came under cultivation.

In the parcel are 130* sheets of specimens. Of these 110—representing nearly 60 species and varieties or forms—have been collected in the district by myself. The others are from the Rev. J. E. Leefe, and a few Alpine sorts from Mr W. B. Boyd. Of local kinds the following are additional to those recorded in the “Eastern Borders” :—

(1) *Salix decipiens*, Hoffm. Frequent in the district. Roxburgh, Berwick, and Selkirk. It is, I believe, the *S. vitellina*=*amerina* of the “East. Bord.” p. 180. Many of the trees are old and in a state of decay. It is easily known from *S. fragilis*, of which it is considered a variety by some botanists, by its habit of growth. It is not so tall, and is of upright growth, all the foliage in old trees being near the top, whilst *S. fragilis* from its spreading habit appears to be leafy to the ground. It is the Cane-Willow of the basket-maker.

Possibly this is the same as the *male S. Russelliana* referred to in the Flora of Berwick, as there is a tree near the mouth of the Whiteadder, growing along with female *S. Russelliana*.

(2) *S. alba* var. *cærulea*, Sm. Not uncommon on Tweedside. Best known from type by the leaves getting smooth beneath at an early period of their growth. Grows to a large tree.

(3) *S. vitellina*, Sm. I have seen only recently-planted trees of this. Not native, I think.

(4) *S. undulata*, Ehrh.=*lanceolata*, Sm. Peatrig bog, sides of Bowmont water, mouth of Whiteadder, &c.

(5) *S. triandra*, L. Tweedside, near Fishwick, and banks of the Till, near Twizell.

* I expected to have added some others but owing to the wet and other causes I could not get specimens, but I trust to be able to add them at some future time.

(6) *S. amygdalina*, L. Peatrig bog, Roxburgh. This form (*concolor*) has narrower leaves than usual. There are typical specimens from Carham, where they were planted.

(7) *S. acutifolia*, Will. Eden bank, planted, not native. A branch, leaves only, which I think is this, in Herb. Bk. Museum, named *S. purpurea*, from "Coldingham, B., 1844."

(8) *S. daphnoides*, Vill. Kelso, planted.

(9) *S. Woolgariana*, Borr. Roadside, Carham, planted.

(10) *S. Lambertiana*, Sm. Plentiful on Tweedside, both male and female plants. I suspect that this will be frequently called *S. Helix*. The *Monandree* is a very variable group, many of the forms passing gradually into each other. Amongst the numerous forms to be found in this district, I have not been able to detect anything that agrees with the *S. Helix* of Smith; although *S. ramulosa*, Borr.=*Helix*, Anderson, is common. Dr Boswell has sunk *S. ramulosa*, Borr. under *S. purpurea* in the 3d ed. of "Eng. Bot."

(11) *S. rubra*, Huds. The typical plant, with long linear leaves, is not uncommon in the district. A form with shorter, somewhat lanceolate, slightly downy (when young) leaves is also frequently to be met with. I have seen it on the banks of Wooler water, on a burn side near Coldingham, at the mouth of the Whiteadder (female) and where the Grange burn crosses the road (male) near Berwick. That at the last named station is *S. decipiens*, "Fl. Berw." i., 212, and *S. purpurea* "East. Bord." p. 179. There is also a specimen of the same in Kelso Museum from Dr Johnston named *S. decipiens*.

(12) *S. Forbyana*, Sm. Frequent.

(13) *S. stipularis*, Sm. Type from Tweedside at mouth of Carham burn. A form with the stigmas divided as in *S. Smithiana*, but with the stipules and general characters of *S. stipularis* grows in Peatrig bog, and on the sides of Bowmont water.

There is a very peculiar form in Peatrig bog, which Mr Leefe thinks is best referred to *S. stipularis*; the leaves of which resemble *S. ferruginea* both in form and texture, but it differs in the stipules; and the catkins are like those of *S. stipularis*, but the germen is "manifestly stalked." *S. stipularis* grows also at Coldingham Loch, Berwick, and on the roadside between Wooler and the Common Burn. But as I have not seen catkins from the two last stations, I am uncertain whether they are the plant of Smith or the form with cloven stigmas,

(14) *S. ferruginea*, And. Frequent. I suspect that either this or a long leaved form of *S. caprea* would be the *S. acuminata*. "Flora Berw." i., p. 217.

(15) *S. rugosa*, Leefe. Male and female, both frequent, the latter most plentiful. This appears to be rather tender, as the points of the young shoots are always killed during the winter, owing, I believe, to a habit it has of making a late growth, which does not get ripened. Even when leafless it can easily be distinguished by this from the allied *S. ferruginea*, and also from *S. Smithiana*.

(16) *S. acuminata*, Sm. Seen only on the roadside at Carham, where it has been planted.

(17) *S. Weigeliana*, Sm. Frequent and variable. I have found it in Roxburgh, Berwick, and Selkirk.

Of *S. nigricans*, Fries, we have many forms, none of which fits in every particular with the published descriptions of them, which seem to have been made, for the most part, from single individual plants. Amongst them are forms very near, or intermediate between.

(18) *S. nigricans*, Sm.

(19) *S. Forsteriana*, Sm.

(20) *S. rupestris*, Don.

S. Andersoniana, Sm.

(21) *S. Damascena*, Forbes.

(22) *S. cotinifolia*, Sm.

(23) *S. hirta*, Sm.

In the "Flora of Berwick," vol. i., p. 216, *S. Andersoniana* is described, and recorded—"In a hedge near Mount Pleasant, Durham." In vol. ii., p. 289 of the same "Flora," "the reader is requested to erase *S. Andersoniana*, and in its place to insert *S. Forsteriana*," with a description of the latter. Again in the "Eastern Borders," p. 182, *S. Andersoniana* is recorded from the same locality, with this remark:—"From a mistake of Mr Winch this was described as *S. Forsteriana* in Berw. Flora." From the wide difference between the germens of *S. Andersoniana* and *S. Forsteriana*, and that Winch, who had paid a good deal of attention to the genus, was not likely to make a mistake between these two, I was very anxious to see specimens. From Dr MacLagan, who knew the station where the specimens were obtained, I learned that the plants were destroyed. But on looking

over the specimens in the Herbarium in Berwick Museum, I came upon a sheet which throws some light on the subject. On the same sheet are two young shoots with catkins, and one barren branch showing mature leaves. They were labelled *S. Forsteriana* and *S. Andersoniana* from the above locality, so that there is no doubt that they are from the plant, or rather plants referred to in "Fl. Ber." and "East Bord." The two shoots with catkins are from *two* different Willows, viz., *S. Andersoniana*, or some other with *smooth* germen, and *S. Forsteriana*, or some other with *silky* germen. From which it appears that both varieties were growing together, thus accounting for the contradictory records.

(24) *S. ambigua*, Ehrh. Many plants of this supposed hybrid—both male and female—between *S. aurita* and *S. repens*, are growing at Lurgie Loch. Some of them are four feet high, and a good deal more in diameter. Both sexes are also in Primside bog, but are not so characteristic as the Lurgie plants.

(25) *S. parvifolia*, Sm. ? Primside bog.

(26) *S. incubacea*, L. ? One of the many varieties or forms of *S. repens*, which are both plentiful and variable in Lurgie Loch. Neither of these two last exactly fit the description of these varieties, but they are the nearest.

From p. 180 of the "East. Bord." I quote the following:—"*S. fusca*, D. On the links of Holy Island, and on Ross Links, where it forms patches, in general of a circular form. The plant was considered to be *S. argentea* until the error was corrected by Mr Borrer, who saw specimens in the herbarium of Mr Embleton." See Trans. Berw. N. Club., ii., p. 122. The error is one that can plead "ancient authority" in apology. With. Bot. Arrang. ii., p. 52. Mr Embleton's plant may have been *S. fusca*, but *S. argentea* also grows on Ross Links. Along with the Rev. A. Davidson, I was there in August, 1875, when we gathered both *S. argentea*! and another of the *repentes* which came nearest *S. prostrata*. It (the latter) grew in large, mostly circular, patches, but it differed from *S. fusca*, which, according to the "Eng. Fl." has the "germen sessile nearly smooth, tapering into an elongated style," by having a long pedicel and a very short style. There might have been other varieties of *S. repens*, but as our time was limited and *Psamma Baltica* being the chief attraction, we might easily have missed them.

On the Growth of Ornamental Trees at Linden, &c. By
Mr R. G. BOLAM.

It may be of interest to members of the Club to note the growth of Trees, especially those of an ornamental character, and in giving the following notes, I would suggest that similar details might be given from time to time by friends, and if correctly stated would be, not only of interest, but of real service.

Two years ago, and again this month, I had the following measurements made of two specimen Trees growing at Linden, the property of Mr Ames.

An *Araucaria imbricata* (male) in the kitchen garden, a very fine specimen, planted there in 1846, and growing upon a gravelly lawn with a clay subsoil, measured:—

	In Height.	Girt at Ground line.	Girt at 3 feet from Ground.	Circumference of branch.
21 May, 1875	27 feet.	4 feet 6 inches.	3 feet 8 inches.	23 yards.
18 June, 1877	30 ft. 6 in.	5 feet.	4 feet 1 inch.	The same.

A *Wellingtonia gigantea* on the grounds, east of the house, planted in 1856, and growing upon a clay soil, measured.

	In Height.	Girt at Ground line.	Girt at 3 feet from Ground.	Circumference of branch.
21 May, 1875	24 feet.	7 feet 3 inches.	4 feet 7 inches.	17 yards.
18 June, 1877	26 ft. 9 in.	8 feet 6 inches.	5 feet 4 inches.	The same.

A *Pied Flycatcher* was observed at Linden, on 16th May, 1877, by the gamekeeper, who describes it as being a very fine specimen, and he having shot a similar bird in 1872, now preserved at Linden, and recorded in the Club's Transactions of 1872, vol. vi., page 426, I have no hesitation in accepting his account as correct.

Berwick-on-Tweed, 22nd June, 1877.

On the Estate of Lees, in the Parish of Coldstream, Berwickshire. By JAMES HARDY.

The lands of Lees, were a portion of the territory of Hirsell, belonging to the monastery of St. Mary of Coldstream; but they have not been observed, under their present appellation, in any of the charters at present accessible to the public. In May 6, 1601, "terræ de Braidhauch et Lies, ad viginti sex solidatas et octo denariatas terrarum," were part of the barony of Linton, which Dominus John Ker de Hirsell, knight, held in feu-farm, originally from the church, but now from the crown.* In 1621, on the dissolution, by Act of Parliament of the "priory" of Coldstream, in favour of Sir John Hamilton of Trabroun, knight, he acquired with the other ecclesiastical, property of that house, "all and hail the landes of Braidhauche Dedriche and Leyis lyand on the south syid of the burne of Leitte towarde the monasterie."† This Sir Thomas, third son of Thomas, first Earl of Haddington, was a great spendthrift. "Having gotten in partage, the barony of Trabroune, and great sums of money besides, by his riotous living, he dilapidated all, and he himself died before his father's death."‡ The first Earl of Haddington died in 1637.

On January 8, 1633, Lancelot Pringill de Leyes, is retoured heir of Alexander Pringill de Leyes, his father—"in terris de Braidhauche et Leyis, cum lie Onsteid vulgariter vocato Henhousewallis, Byrewallis, et Dowcat hill, in dominio de Cauldstreame."§ In 1648, Act. Parl. Carl I., in an Act for "putting the kingdom in ane posture of warr for defence," "Lancelote pringle of Leyis" is one of the commissioners for Berwickshire.|| He was dead in 1681, when his name is cited in an Act of Ratification in favour of Robert Pringle of Cliftoun of the lands of Cliftoun, as having, in conjunction with his son Robert, purchased a five merk land in Cliftoun, from Andrew and David Young of Harwell, in that place.¶ Of Robert nothing more can be ascertained, but in 1676, "Leyes" was the property of James Pringle.** Like many other estates at that period, it had become encumbered,

* Inquis. Valorum, No. 7. † Acts Parl. Scot., vol. iv., p. 648.

‡ Scot's Staggering State, etc., p. 70.

§ Inquisit. Retornat. Abbrev. Berwickshire, No. 187.

|| Acts Parl. Scot., vol. vi., part ii., p. 33.

¶ Ib. vol. viii., p. 288.

** Fountainhall's Decisions, vol. i., p. 529.

and Mr George Gibson had obtained an absolute disposition of it in his favour. Gibson becoming insolvent, by a clandestine transaction, wished to redispone the lands to Leyes, "on promise to give him new security for what after compt and reckoning should be found due by Leyes to George." The Court of Session, Dec. 9, 1692, found the re-disposition fraudulent; and that "Leyes estate must lie open to all Mr George's debts."* On appeal, Feb. 23, 1698, the lords declared they would hear Leyes in June, "if he would find caution for his intromission with the rent, 1692, and remove at Whitsunday, and cede his possession to Gibson's creditors; and if not, then reduced his right."† Whatever measures were adopted, Leyes managed to sustain his position, till a later period. The subsequent succession, is somewhat remarkable, and I am indebted to the courtesy of Sir John Marjoribanks, Bart., for a memorandum, through his agent, of the proprietors of Lees from 1701 downwards, showing their relation one to the other, and requiring little other explanation.

Memorandum as to the Estate of Lees :—

- In 1701, James. Pringle (No. 1) younger of Lees, married Elizabeth, daughter of James Marjoribanks (No. 1).
- In 1707, James Marjoribanks (No. 1), sixth son of John Marjoribanks of Leuchie, acquired the lands of Lees.
- In 1731, James Marjoribanks (No. 2), son of the preceding, succeeded to Lees.
- In 1752, James Marjoribanks (No. 2) executed a Disposition and Deed of Entail in favour of James Pringle (No. 2) and substitutes.
- James Pringle (No. 2), son of James Pringle (No. 1) and Elizabeth Marjoribanks, and nephew of the entailer, succeeded.
- In 1769, Edward Marjoribanks of Halyards, succeeded.
- In 1815, Sir John Marjoribanks, eldest son of the preceding, succeeded.
- In 1833, Sir William Marjoribanks, eldest surviving son of the preceding, succeeded.
- In 1834, Sir William died, and was succeeded by Sir John, the present baronet.

Burke, in his *Peerage and Baronetage*, says that James Pringle,

* Fountainhall's Decisions.

† Ibid, p. 564.

who became heir to Lees in the right of his mother, was the last survivor of the very ancient family of Pringle of Torsonce, which would imply that the Pringles of Lees belonged to that branch of the family. I shall not presume to trace the Lees branch of the family of Marjoribanks farther than Aug. 27, 1653, when "John Merjoriebanks of Leuchie, sone to Marione Sympsone," was retoured heir-portioner of Andrew Simpson, merchant burghess of Edinburgh, his wife's uncle.* Edward Marjoribanks of Halyards, in Linlithgowshire, from his being called to the succession, may be presumed to have been of the Leuchie family. Leuchie is now incorporated with the North Berwick property, and has left its name attached to the mansion-house, the seat of Sir Hew Dalrymple, Bart. Edward Marjoribanks had purchased the lands of Halyards from Mr Thomas Skene, advocate, before June 20, 1705, when he was involved in a law-suit with Skene's creditors; but the litigation, which was unjust as against Mr Marjoribanks, was compromised.† He was the father of John Marjoribanks, whose son Edward eventually became heir of entail of the Lees property.

* Inquis. Ret. Abr. Haddington, No. 3835.

† Fountainhall, vol. ii., pp. 277, 278.

Report of the Experimental Committee of the Tweed Commissioners, presented to the General Meeting of Commissioners on 3rd September, 1877.

The Committee have held three meetings during the last twelve months. On the 18th October, 1876, at Union Bridge, 186 Black-Tails, 3 Whitlings, and 1 Grilse were marked, and their numbers registered.

The other meetings were held at Carham, for the purpose of continuing the examination of the Orange Fins placed in the pond there on 7th May, 1874. The original number was 133, but it has been reduced by deaths and capture of specimens for experiment, some of which have been artificially preserved.

On 13th December, 1876, 80 fish were taken out, weighed,

measured, and returned to the pond in a plump, healthy condition, most of them being Whitlings, and others having assumed the distinct character of Bull Trouts. The average increase in length between 4th July and 13th December was $\frac{3}{4}$ of an inch.

On the 17th May, 1877, a second examination took place. Seventy-eight fish were caught, in good condition; but between 13th December, 1876, and 17th May, 1877, the average increase in length was only $\frac{1}{10}$ of an inch.

It will be remembered that in the 2 years and 58 days precedent to the 4th July, 1876, the average increase in length was about 5 inches.

The fact that Orange Fins are the younger stage of the Whitling and Bull Trout, was, by means of witnesses who had been present at all the proceedings affecting the enquiry, satisfactorily proved before the Sheriff of Peeblesshire, who originated the doubts on the subject, and it is to be hoped that the question of identity and the character of Orange Fins, as members of the Salmon tribe, will not again be disputed.

A return of fish, which had previously been marked and afterwards re-captured, is appended, being a continuation of similar returns presented along with the Committee's former reports.

Amongst others, a Salmon, 18lb. in weight, was, in September last, taken from one of the Fisheries of the Berwick Salmon Fisheries Company; it had a growth or protuberance on the upper part of the tail, which, on being cut open, disclosed a silver wire exactly where *Smolts* had been marked by the Committee, and corresponding with the wire used for the purpose in May, 1873, and April, 1874. Unfortunately, the person who extracted the wire broke off the part which contained the number of identification, and lost it; it is therefore impossible to affix the date when the fish was marked as a Smolt.

A third instance has occurred of a Black-Tail marked in the Tweed, being captured in the character of a Bull Trout in the Forth. A wire numbered 1247 was inserted in the tail on October 18, 1876, at Cove Sands, the fish (Black-Tail) then measuring 13 inches in length, and weighing $13\frac{1}{2}$ ounces. When caught between Alloa and Stirling on 2d August, 1877, 289 days afterwards, it measured 16 inches, and weighed $28\frac{1}{2}$ ounces, more than double the weight it was in October, 1876.

R. H. HUNTLEY, *Chairman.*

Berwick-on-Tweed, 20th August, 1877.

RETURN OF FISH CAUGHT IN THE RIVER TWEED,

WHICH WERE MARKED AND RETURNED ALIVE TO THE RIVER, AND WERE
AFTERWARDS RECAPTURED,

During the period from 16th August, 1876, to 20th August, 1877.

No.	SPECIES OF FISH.	Date of Marking	Where Marked.	Weight. Inches.	Length in Inches.	Species of Fish when Recaptured.	Date of Re-Capture.	Where Re-taken.	Weight.	Length in Inches.	Difference in Weight.	Difference in Length.	Interval between Marking and Re-capture
93	Black Tail	1875. Nov. 10	Heughshield.	12 oz.	13	Whiting.	1876. Aug. 17	Yardford.	16 oz.	16½	4 oz.	3½	281 days.
29	Do.	Do.	Do.	10 "	13	Do.	Sept. 4	Wilford.	26 "	15½	16 "	2½	299 "
—	Not known	—	—	—	—	Salmon.	" 12	River Tweed.	18 lbs.	36	—	—	—
222	Black-Tail	1876. Oct. 18	Cove Sands.	12½ "	12½	Black-Tail.	Oct. 18	Carr Rock.	12½ oz.	12½	—	—	Found dead
1232	Do.	Do.	Do.	12 "	13	Do.	" 20	Cove Sands.	12 "	13	—	—	Do.
215	Do.	Do. 1875.	Do.	9½ "	12	Do.	Nov. 27 1877.	New Mills.	9½ "	12	—	—	9 days.
95	Do.	Nov. 10 1876.	Heughshield.	11 "	13	Bull Trout.	July 16	English New [Water.	3lb 12oz	21½	3lb 1oz	8½	613 "
1247	Do.	Oct. 18	Cove Sands.	13½ "	13	Do.	Aug. 2	Black Grange (Strirling).	28½ oz.	16	15 oz.	3	289 "

Local Documents. By JAMES HARDY.

I. BERWICK.

James Fitz-James, Duke of Berwick, and the Town of Berwick, 1687, 1688.

James, Fitz-James, Duke of Berwick (born Aug. 21, 1670), the natural son of James VII., by Arabella Churchill, sister to the great Duke of Marlborough, was designed by his father, for general of the standing forces of the realm; and to qualify him with more experience, and to establish his reputation, he was sent into Hungary to pass a campaign in the Imperial army. (Kennett). He was present at the siege of Buda when captured by the Duke of Lorraine from the Turks (1686), and at the battle of Mohatz (1687) when the Turks were signally defeated by the Austrians. On his return his father conferred upon him the title of Baron Bosworth, Earl of Tinmouth, and Duke of Berwick, with the order of the Garter. In the latter year he commanded the Princess Anne of Denmark's regiment, then in garrison at Berwick.—“March 17, 1687. At Privy Council, there is a letter from the King, appointing that the garrison of Berwick, and Fitz-James his son, now Duke of Berwick, may come over to the Scots border, and suppress any field conventicles, or risings there; the King's Scots forces not lying near that place. And least this should be reputed an inlet to foreigners, the Scots forces are allowed to go to the English borders on the same occasions.” (Fountainhall's Decisions, vol. i., p. 452). Historians do not scruple to infer that this interchange of forces was meant to subserve the final subjugation of both kingdoms. Following close on this appointment, the Mayor and Common Council of Berwick transmit their congratulations to the newly-titled youth of 18, and adopt him as their patron in furthering the town's interests. Mr Scott has favoured me with the following extracts, being all that is contained in the Town Records, illustrative of this epoch in the life of a distinguished general and upright man. During the siege of Philipsburgh, the Duke of Berwick was killed by a cannon shot, June 12th, 1734, at the age of 63, when in command of the French, then at war with Germany. His death was regarded by the French as a public calamity.

(Extracts from Records of the Town of Berwick-on-Tweed.)

A copy of the letter to his Grace the Duke of Berwick congratulating him on his assumption of the Title.

May it please your Grace,

The High honour you have vouchsafed to this ancient corporation in taking it into your patronage; hath laid a perpetuall obligation vpon vs to observe your Graces commands vpon all occasions.

This Towne is capable of great improvements for his Maties service, it is more considerable being a Cheife Barrier between the two great Kingdomes of England and Scotland, but your Grace hath rendered it most considerable with the Influence of this title of Protection of a Prince who hath so lately signalized and distinguished himself in martiall Atcheivements against the common Enemy of Christendome.

Long may your Grace live a Support to the King's Loyall Subjects, a Terror to his enemies, and a Blessing to these Kingdoms. See heartily pray,

May it please yor Grace,
Your Graces Most
Obedient Servants,

Berwick, March

the 18th, 1686-7.

WM. LAWSON, Mayor,
and Common Council.

3 April, 1687.

This day received a letter of thanks from his Grace the Duke of Berwick directed to Mr Mayor and the Councell which is ordered by the Common Councell to be registered.

The letter to ye Mayor and Comn Councell from ye Duke of Berwick.

Whitehall, April 3rd, 1687.

Gentlemen,

I Received your Letter of Congratulation and thought me Selfe Obliged to return you my thanks for it. I am Glad his Matie has conferred on me the title of soe Loyall & Ancient a Corporation as you are. And doe Assure you that soe Long as your Zeal and faithfulness for the King's service continues you need not question all the Affectionate and favorable Assistance in ye Power of

Gentlemen,

Your Humble Servant,
BERWICK.

22 March, 1686-7.

Major Innes shall deliver the Ticket for his Grace the Duke of Berwick to be a Burgess of this Corporation, & Major Innes requested to call of Col. Widdrington or Captain Bickerstaffe that they may goe along with him if they please.

12 May, 1687.

This day ordered that Mr Mayor, the Justices, and the Alderman for the year shall meet to consider what is requisite to desire of his Grace the Duke of Berwick for ye Goode of the Towne & to make report to next Councell.

19 May, 1687.

This day Col. Widdrington is requested by ye common councill to write a letter to his Grace the Duke of Berwick to continue Recorder for this Towne if his Grace will accept of it; if not his Grace would be pleased to signifie his pleasure in it.

26 July, 1688.

An address is now sent to the King from Berwick and hence we have this entry and letter.

This day Mr Mayor sent a letter of thanks to his Grace the Duke of Berwick for the Honour done us of having presented our address to the King.

Copy of letter of thanks.

May it please your Grace,

Wee being highly sensible of your Graces great favour to us in introducing our address to his Matie, we cannot but return yor Grace our most humble & hearty thanks for the same & upon all occasions there shall be a dutifull

acknowledgement shewn to your Grace by my Lord,

Your Graces most humble & most obdtt. Servants,

JOHN PRATT, Mayor,

& 19 others of Councill.

II. BERWICK.—*Rebellion of 1715-16.*

(*Extracted from the Town Records by Mr JOHN SCOTT.*)

The Examination of Francis Tunstall, Gentl., taken this 9th day of March, 1715-6, before the Rt. worsfull, John Sibbit, Esq., Mayor, Anthony Comp-ton, and Matt. Forster, Aldermen, three of his Matie Justices of the peace for Berwick aforesaid.

This examinant saith that he is the son of one George Tunstall, who went out of England with the late King James, and was by his mother carried over into France; that he was brought up at the Court of St. Germain's, until abt 8 years ago, and from thence was carried to Strasburg, in Germany, with his mother, who, as he has been told, had a pension allowed her by the Bpp of Strasburg,—that he stayed there till he was ten or eleven years of age,—that his father being then dead, he was sent to Doway, where he was educated in his Grammar & Rhetorick about 7 years in an English colledge, being by the interest of the Late King James' Queen put upon the foundation of the Scholers there,—that he run from his studies there to Abberville, and there inlisted himself in the French Service, in the Regiment of Unaille, where he carried arms as a private Centinel for one year & a half,—that this Examinant deserted from the sd. Regiment, and came to Arras, where he mett with one Capt. Charles Wyndham, an officer in Derrington's regiment of Irish in the French service, who he has served about a year & a half,—that about the 29th of Janry, N.S., he embarked at Calais, with his Master, on board a small vessel (the Master & Sailors being all French),—that about the 5th of Feby, N.S., they landed at Montrose, with the Marquis of Tinnmouth, Sir Thos. Hukens, Secretary to the Pretender, a Son of the Lord Middletons, Capt. Strickland (as he believes of Nugent's horse), Brigadier Cook, Brigadier Guidon, and Several other Subaltern officers, to the number of about 20, besides Servants,—that the said officers gave to the Master for their freight 100 livres each,—that another small ship, on board of wh. was genll. Sheldon, came likewise about the same time from Calais, and landed at Arbroath,—that a third ship also came from Calais the day before with several other officers, Irish, and landed at Aberdeen, as he hath heard,—that as soon as they landed at Montrose they sent to the Pretender to have his orders (who was then near Perth), but had no return till abt 8 days after, when they were ordered to go to the North, to joyn the Erle of Seaforth and the Marquis of Huntly,—that on their way to Aberdeen they heard the news of the Pretender's going off upon the approach of the Army of the Duke of Argyle,—

that upon the hearing of this news, the Marquis of Tinmouth, His Master, and the other gentlemen that came over with this Examinant travelled directly for Aberdeen; and from thence travelled night and day for Peterhead, where they forced the Master of a ship that lay there to unload in order to take in their baggage. But an English Man-of-warr appearing off that place they thought it not safe to go off then, and therefore went forward to Frazerburgh, 12 miles further; And a man of warr appearing off there also, they went to Badenoch, except the Marquis of Tinmouth and his servants, who left them that day,—that at Badenoch they came up with a great part of the Highland army, as he supposes to the no. of 800 men, under the command of General Gordon, and the Erl Mareschal, who went towards the hills to pass towards the Isle of Skie,—that all the Gentlemen in company with his Master went to the Mountains along with the Highlanders, except his Master and one Colonel Scott, (who they mett at Badenoch), and one Capt. Robertson of Straughan. And they together returned South towards the Kirk of Straughan, and from thence to Carie, a house near a Lough almost 28 miles from Perth,—that they stayed there about 8 days, in which time the said Capt. Robertson of Straughan went to visit his nephew at the Erl of Broadalbions (*sic*), and going there had had two of his servants taken by the country; and hearing that one Capt. Starling with some of the army was coming up he returned to Carie, & notice being brought to the House of their approach the said Robertson with his Master & Coll. Scott, this Examinant & several others to the no. of twelve betook themselves to a boat in the said Lough & continued there all the night. And upon the party's removal they came back to Carey where not thinking themselves safe they removed to another pleasure house of Robertson's of Straughan about 4 miles of Carey called Mount Alexander,—That his Master, Capt. Wyndham, having wrote a letter to his Grace the Duke of Argile, this Examinant was sent to Edinburgh with that letter supposing to find the Duke there,—That in case the Duke of Argile was not at Edinburgh, he was directed by his master to take shipping at Leith for London, if he could; otherwise to go on towards London by Land. That this examinant came accordingly away from his master with the sd. letter thro' Perth and Edinburgh to Berwick, where he came in alongside the Packett on horseback, & being sent for by the Capt. of the Guard was stopt.—And being examined by Major Green who commands in that Town, the letter wh. he was carrying to the Duke of Argile was found on him by the Capt. of the Guard & delivered to him,—That the sd. letter, as this Informant declares, contains offers of Submission from his master to the Duke of Argile about it. That this Examinant was directed by his master to call at Newcastle upon one Mr. J. Whitewell who his Mr. said he had seen at Paris, & St. Germain's, & he would furnish him with money to carry him to London: And that Capt. Wyndham's his Master's Mother who lodges at one Mr. Mohun's in Little Wild Street wd. furnish him with money to return back to him at Carey—where if he was not he would hear of him. That his master at parting told this Examinant that in his letter he had desired the Duke of Argile to direct to a person at Perth. But upon second thoughts had resolved to send this Examinant with the letter and to bring an answer.

That he this Examinant is a Roman Catholicik.

FRANCIS TUNSTALL.

Examinant Die et Anno Supdict. coram

JOHN SIBBIT, Mayor,
ANTHONY COMPTON,
MATTHEW FORSTER.

At present I cannot trace the belongings of Francis Tunstall, the narrator of this interesting episode in the Jacobite rebellion of 1715-16. In "A List of the Roman Catholics in the County of York, in 1604," edited by E. Peacock, F.S.A., London, 1872, only one Yorkshire family of the name occurs; viz., Francis Tunstall, Esq., whom the editor conjectures to be Francis Tunstall, of Thurland. Divers recusants were wont to resort to his house "but come not to ye church." "Gerard ffawden, a recusant, doth teache Francis Tunstall his children." (pp. 85, 86.) Attention may be turned in that direction. Mr William Tunstall, "a papist," paymaster-general and quartermaster-general in 1715-16, to Gen. Forster, "a Yorkshire man, second son to a gentleman of that county of a plentiful estate," was taken prisoner at Preston, (Patten's Hist. of the Rebellion, pp. 67, 112, 113.) The Wyndham family had strong Jacobite proclivities, and under suspicion of being engaged in a plot, in September, 1785, the chief, Sir William Wyndham, was committed to the Tower of London. Other parties named can be identified. The Marquis of Tinmouth was son of the Duke of Berwick. "Captain Robertson of Straughan," is Alexander Robertson of Strowan,—the Jacobite poet,—chieftain of the clan Donachie, whose main residence was at Mount Alexander, near the eastern extremity of Loch Rannoch. He was captured shortly after, but contrived to escape to France; and was subsequently engaged in the rebellion of 1745-6. He died in his own house at Carie, in Rannoch, April 18th, 1749. He is the prototype of the "Baron of Bradwardine," in *Waverley*. The Duke of Argyle set out for London out on the 1st, and arrived there on the 6th March, (Struther's Hist. of Scotland, i., p. 411.) Tunstall's deposition agrees with contemporary accounts. — J. H.

III. DEERFORESTS OF SCOTLAND, 1291-1296.

Gifts of Deer and Timber made by Edward I., from the Royal Forests of Scotland. (Rotuli Scotiæ, vol. i.)

Edward I., in 1291, to gratify his principal supporters among the Scottish magnates, intended to have conferred on them, a proportion of landed property, according to a schedule still preserved among the Scottish Rolls. This scheme was not executed, but they were otherwise compensated, some by large sums of money, and pensions; others by donations of timber to

repair sacred edifices; but the most signal tokens of the royal bounty were displayed in profuse presents of venison from the royal forests. As two of these forests, those of Selkirk and Jedburgh are comprised within our bounds, these are interesting facts to know; and their recital will contribute a few more incidents to the history of the Red Deer on the Borders, additional to what is already told in the History of the Club, vol. iv., pp. 214-217. The grants for the whole kingdom being of limited compass may be specified, as well as the bestowal of timber trees, which being for public purposes, is less blameworthy. By a writ dated Newminster, 18th August, 1291, to Alan, [St. Edmunds] bishop of Caithness, chancellor of Scotland, Simon Fresel [Frazer], keeper of the forest of Selkirk is enjoined to bestow upon the venerable fathers, William, [Frazer] bishop of St. Andrews, 30 stags; Robert [Wishart], bishop of Glasgow, 20 stags and 60 oak trees; and the bishop of Caithness for himself, 10 stags; James the Steward of Scotland, 20 stags; Patrick de Dunbar, Earl of March, 10 stags; William de St. Clair, 6 stags; and brother Brian (de Jaye), preceptor of the Templar Knights in Scotland, 4 stags, and 4 oak trees. An order had already been procured by this active partisan of Edward, dated Chatton, 14th August, 1291, to the keeper of the forest of Clackmannan, for four oaks adapted for timber, (Rot. Scot. i., p. 4.) William de Soules was to have 10 stags; John de Soules, 6 stags; William de Haya, 6 stags; and Alexander de Balliol, the Lord Chamberlain, 10 stags; the deer &c., to be delivered in places the most contiguous and convenient to the recipients. Simon Fresel was at the same time to have ten stags; and by a second deed of the same date, Thomas de Clenhull was to have four deers from the same forest. (Ib. p. 5.) This Thomas de Clenhull, we afterwards, in 1292, discover as a knight, in Edward's service, (p. 15); but in the reign of Edward II., in 1308, he or one of the same name, is mentioned as an imprisoned Scot, about to be released from the castle of St. Briavell, (p. 61). One hundred and forty eight deer constituted this first distribution. Furthermore, Reginald le Chen, (or Cheyne) senior, and his junior namesake, both men of official consequence, the son at least afterwards a pensioner of Edward, obtain (of date at Thresk, 23 Aug., 1291) from the forest of Spey, the father 10, and the son 6 deer. (Ib. p. 5). On the 26th October, the Bishop of Caithness is granted from the wood of "Ternway," in Moray, 40 oaks suitable for timber to be used in the construction of the Cathedral Church of Caithness. (Ib. p. 6). The bishop did not live to see his desires accomplished, having died before Jan. 8, 1291-2, (p. 8). Consequent on the decease of Simon Fraser, the custody of the forests of "Trequer" and Selkirk was committed to William, the son of John Comyn, 15th Jan. 1291-2., (p. 7). William Comyn, provost of St. Andrews, acquires by letters, dated Berwick, 16th June, 1292, 6 stags from the forest of Plater; (p. 8); and on the 6th July, by a similar order from Berwick, William Comyn, keeper of the forest of Selkirk was to deliver 6 stags as a royal gift to the abbot of Jedburgh (Geddewrth); Thomas Randolf, from the same forest, was also to obtain 6 deers. In like manner from the forest of Alnede de Spey, John Comyn, Earl of Buchan, the date being the 10th July, had 10 stags consigned to him; while in the forest of Collyn,

Alexander Comyn got 3, and three others in the forest of "Buthen;" and coming back to the forest of Selkirk, Master Adam de Botindon, the vice-chancellor of Scotland, received 4 stags, (p. 9). Also, while the King was at Berwick, 12th July, 1292, John Comyn, Earl of Buchan, keeper of the forests of Durrus, Colyn, and Aberdeen, was to allow William [Frazer], bishop of St. Andrews, to have 30 deers of the gift of the king, (p. 10).

In 1296, when in consequence of Balliol's deposition, the personal authority of Edward was again established in Scotland, the royal forests were anew, although in a less degree, turned to political purposes. On the 30th August, the keeper of the forest of Platers is enjoined to let the abbot of Aberbrothock have 50 oaks suitable for timber-work, (p. 24). Berwick, Sept. 15, 1296, James, the Steward of Scotland, was to have 10 stags as a kingly gift from the royal forest of Jeddworth; and by a prescript from Alnwick, 20th Sept., John de Stryvelyn had orders for 10 stags from the forest of Alith (p. 33). Strevelyn had recently been re-possessed in his lands, (p. 28). By a brief from Berwick, Sept. 15, the keeper of the king's forest of Selkirk is to present Reginald de Crauford with 6 stags, (p. 34). He was made sheriff of Air by Edward at Roxburgh, 14th May, 1296. This is the uncle of Wallace, the patriot, the same who was afterwards treacherously murdered by the English governor of Air. Finally, king Edward issued a mandate from Durham 5th Oct., 1296, to John de Warenne, Earl of Surrey, keeper of his realm of Scotland, to bestow on Walter de Agmodesham (Keith calls him Agmundesham), the Scottish Chancellor, 8 deers from the forest of Selkirk (p. 36).

Thus within these five years, 1291-1296, 266 deers and 158 timber trees, of oak, were drawn by Edward I., from the royal forests, to conciliate the Scottish grandees.

IV. BAMBURGH, 1384. *Coals in Bamburghshire.*

To John de Nevill, Lord of Raby and keeper of the East Marches, licence is allowed of digging Coals, if they can be found in the domain of Bamburgh, for use of the men dwelling in the Castle of Bamburgh. (Rot. Scot., vol. ii., p. 8. 8 Richard II.)

The King to all whom, &c., Greeting. Be it known that seeing our beloved and faithful John Lord de Nevill, has the keeping of our castle of Bamburgh with its pertinents, for the term of his life, from our grant, as is more fully contained in our patent letters passed for that cause; we at the entreaty of John himself, with the assent of our council, have conceded and given licence for ourselves and our heirs, that he may make search and cause to dig for sea-coals throughout our domain of Bamburgh, in our lands and wastes there, and that he may have power to take of the coals if they be discovered there, from time to time during his lifetime, as many as may serve for the

fuel and storage of the said castle, and as may suffice for all those dwelling therein, and that the sale of the remainder of the coals may be available to relieve the said John of the expenses incurred in the search for such mines. Witness the king at Westminster, 14th December, [1384]. By brief of Privy Seal.

V. COCKBURNSPATH, 1389.—*Numbers of the Border Flocks in early times.*

Safe Conducts and Protections for the Shepherds and Sheep of the Countess of March and Mary Heryng, (Rot. Scot. vol. ii., p. 99. 13 Richard II.)

The king to all and singular his admirals to whom, &c., Greeting. Know that we of our special favour, at the entreaty of our beloved and faithful cousin, Henry de Percy, the son, have granted to the Countess of March of Scotland, that she may have power to send two shepherds of Scotland with one thousand sheep to Colbrandspath to pasture them there and for five miles round, when it shall please the said Countess during the three years next following. Desirous of providing for their security in this particular, we have taken these shepherds with the sheep aforesaid, in their coming towards the places mentioned, in their continuance there, and in pasturing the sheep, as well as in returning thence to their own localities, into our safe and secure conduct, and our special protection and defence. And therefore we enjoin that the said shepherds with the said sheep, in coming towards the foresaid places, & during their continuance, and in the feeding of the sheep, & proceeding thence afterwards to their own localities, you will maintain, protect and defend, not bringing upon them, nor as far as in you lies permitting to be brought, any injury, molestation, damage, violence, arrestment, obstruction, or gravamen, whatsoever. And if any one makes any attachment of them, or does to them any injury, let it be corrected and reformed without delay. Provided always that if we in our own proper person with our army, before the end of the said three years, pass over into Scotland, then for the time when we are thus personally present with our aforesaid army, our present letters shall have no strength or virtue. To continue in force for the aforesaid three years.

Witness the king at Westminster 12th July [1389]. By brief of Privy Seal.

Letters of a like tenor of safe conduct hath Mary Heryng with two shepherds and 600 sheep, to last a corresponding period.

The king as above. By brief of Privy Seal.

These protections were granted during a three years truce, consequent on the battle of Otterburn.

This is one of the few examples, in that age, so far as these records reveal, of the precise wealth in flocks of a Scottish nobleman; or rather of his Countess, and perhaps her hand-maid. George, the first of the name, was then Earl of Dunbar, and one of the most powerful men in Scotland, but shortly afterwards having revolted to the English king, he involved himself in forfeiture, and entailed ruin upon his posterity. His provident Countess was Christian, daughter of Sir William Seton. John Shrouesbury, herald, alias John Her yng pursuivant to the Earl of Dunbar obtained a letter of protection from Henry IV., in 1404, (*Rot. Scot.*, vol. ii., p. 166). Was he related to the Countess's "Mary?" The Countess and her servant's ownership may have been only a pretext to cover their lord's property.

We have another, but later, private example, in the case of Sir David Home, the first of Wedderburn.—Writing from "Colbrandspethht," 12th March, 1442-3, he complains that his relative and chieftain, Sir Alexander Home of Dunglas, had been permitted by John Olle, the prior of Coldingham, to place a garrison of reivers in the "kyrk" there, "to hald as hous of weer." Thence they harassed those not of their party by driving off their flocks and herds, which they sold in England in a time of truce. "And thar the said Sir Alx. halds a garyson of refars, the qwhilk has taken my lorde of Halis (Hepburn of Hailes) guds, my sonnys and myne, to the number of ma than ij thwzand scheip and iiij score ky and oxin, hafand the guds to English men, and made thare opin markate of thaim, and thai recept thaim, agayn the vertw of the trewis." (*Correspondence &c.*, of the Priory of Coldingham, p. 149). Of these 2000 sheep and 80 cattle, we are enabled to know from Godscroft's History of the House of Wedderburn, that 800 sheep and 35 cattle belonged to Wedderburn, and had been harried from the lands of Upsatlington, Fleimington, and Wedderburn; for that was the number Alexander was afterwards bound to restore. (*De Familia Humia Wedderburnensi*, p. 8, 9.) At a later period the royal flocks were indeed princely; James V. having according to Pitscottie, 10,000 sheep pasturing in the forest of Ettrick. Of the numbers of the flocks in the great monasteries in early periods, we have good instances in the annual reports made by the house of Coldingham to Durham. In 1353, they possessed 1900; in 1354, 2200; in 1359, 2264; in 1371, 2000 sheep of various ages. (*Coldingham Correspondence, &c.*, Appendix.) But all these sink into insignificance in comparison with the opulence of the Abbey of Melrose as a pastoral establishment; the amount of their flocks being 45,023 head. (*Morton's Annals of Teviotdale*, p. 279).

*The Ancient Royal Burgh of Roxburgh: Notice of Stones
exhumed from its site.* Communicated by THOMAS
CRAIG, Kelso.

The ancient royal burgh or city of Roxburgh was for many years an extinct and buried ruin, not a stone remaining above the ground to mark its site or keep it in remembrance. Some facts preserved in ancient records give no slight idea of its extent, importance, and magnificence; but its ruins were for generations as completely buried out of sight as were those of Pompeii or the older Jerusalem. Though some historical records connected with it are still preserved, not much is known of its history. Prior to the time of David I., who raised the Border country to a higher importance than it had previously possessed, and who may be said to have stamped history upon it, the annals of ancient Roxburgh are almost impenetrably obscure, if they are not altogether non-existent. It is only about the time of that monarch that Roxburgh comes prominently into view; but incidental notices in olden chronicles indicate that it had a long previous history, and had been a place of considerable importance. Even the name is a puzzle, being in that like most of our old towns and villages. Fordun gives it the name of Marchemont, while Boethius calls it Marchmond, signifying the "Mount on the Marches." The latter name may still be read on armorial bearings affixed to the front of the gallery of Roxburgh Parish Church—which, it may be necessary to remark, is about two miles to the south-west of the site of the old burgh. Camden styles it Rosburgh, the derivation being thus the "town on the ros," or promontory; but the most ancient name by which it is designated in public records is Rokesburgh, or Rokesbure. Can such a name be traced to a rocky foundation? There are other names by which Roxburgh has been known; but all of them, except two—Marco Saxon, or Marcotaxon, and Marcidun—are only modifications of Roxburgh. Camden's name has long survived in the modern pronunciation of the name by the villagers and country people generally, which long was and often still is Rosebrugh. The situation of the ancient burgh or city of Roxburgh was nearly opposite old Kelso, or, more strictly, Wester Kelso, now extinct, and its site incorporated in the policy of the Duke of Roxburgh. The Tweed separated the two towns; but

there was a ford and a ferry across the river a short distance below their sites within the memory of persons still living. At a long prior date, however, a bridge facilitated communication across the river. In the time of King David of pious memory, as mentioned by Haig, in his "*History of Kelso*," Old Roxburgh was defended by a wall and ditch; but it became so over-populated that either under that King or before his time a new town was built to the eastward of the old, and distinguished by the name of Easter Roxburgh. The old town had a mint during a part of its history, and coins are still preserved which were struck there—some being those of the time of William the Lion, and some those of James II., the latter having, it is supposed, been made and issued while that monarch besieged the Castle in 1460. It could also boast of a burgh or city seal, having been one of the first royal burghs erected by David I., its affairs being administered by a provost or alderman and bailies. It was famous also for its schools, which were under the superintendence of the Abbot of Kelso, who would have less than a mile to travel to visit them. It had also the privilege of an annual fair, named, probably after the patron saint of the burgh, "*St. James's Fair*," which is still held on the 5th of August. Haig, in his "*History*," states that "at present [1825] this fair is held on the site of the Old Town, or, as some authors say, on the site of the church." This statement received confirmation upwards of 20 years ago, for in the course of some levelling operations on the Green, several stones were dug up which had evidently belonged to the church or churchyard. These, as bringing a message from the buried past, possess a peculiar interest, and have a claim upon the tender regards of those who take a kindly concern in the ways and men of past centuries. The stones were found at no great depth below the surface, and it is quite possible that a little more extended search would have increased the number and value of the relics thus restored to the light of day, though they can scarcely be said to have obtained much of the regards of men. They were found within stone-throw of the Tweed, and near the western limits of the Fair ground, as defined by recent practice. The following are a few particulars regarding them:—

I. The most interesting is a fragment of a stone of a hard and slaty nature, altogether unlike any of the others in material. Unfortunately, it has been broken right through from top to

bottom, and a portion seems also to have been broken off the under part. It is the right hand side which has been brought to light. It is three or four inches in thickness, and measures $1\frac{1}{4}$ foot across by 3 feet in length. The central portion of this stone has had carved upon it a figured design of a free and graceful description, but not of a high style of workmanship. From the top of the central portion of the figure, which has been broken away, there run out six curving lines in two sets, which run into the outer two about half way down in their course, the two being continued in a straight line to the bottom, where they widen out, first into a broad oval base, and then into a lesser, beneath which is a freely carved half-oval with downward curling terminations on either side. From the outer line spring at intervals spray figures rather inartistically executed. Around the stone on three sides at least has been an inscription in old style capitals—along the top being still decipherable “LE·MEO”....; and on the right margin “GRA·DE·ROXBVR....” Some of these letters are partially defaced, and they cannot be exactly rendered by any letterpress characters.

II. This is a sand-stone, measuring 3 feet long by 1 foot 2 in. broad. It has, when entire, been apparently a full-length effigy in bas-relief of a human figure, but the upper portion has been broken off, and is not now to be found. The upper part which is left shews a portion of one of the arms and hand and the other hand. At the feet the stone is somewhat raised, and on this raised part the feet rest. This stone, especially the effigy, is much worn, and presents the appearance of having for years and years been trodden by hundreds of passing feet.

III. Two pieces of sand-stone, which have been broken since these remains were unearthed. The remainder is not now among those here preserved. On the stone, which is 1 foot broad, and seems to have been about 3 feet in length, has been carved a human figure under life-size, and clothed in a loose, flowing robe, which conceals even the feet. The execution, however, is not very artistic.

IV. This stone, which has been broken through near the top, is a very hard kind of sand-stone, and on the back bears the mason's chisel marks as sharp and fresh as if they had been cut only a month ago. Its measurement is—length, 6 feet; breadth, 1 foot 3 inches; thickness, 9 inches. It seems to have been

even a little longer; for it has evidently been bevelled all round, but the upper part of the bevelling has been broken off. Near the centre has been cut a figure which may be taken to represent either the shears or the compasses, most probably the former, as a lengthwise indention has been cut above where the two limbs meet, which is of greater extent than would be required for compasses. Another consideration favouring the idea that the symbol represents the shears, is the fact that they invariably mark the grave of a female of high rank? The carving is not deep, neither is the workmanship first-rate, though it is respectable enough to show that it is the work of a mason.

V. This also is a sand-stone, and measures nearly 1 foot broad by 1 foot 7 inches long. It is in fair preservation. From a base of "corbie-steps" rises a shaft, from a point on the top of which radiates an eight-branched design, each branch thickening towards the end, and terminating in half diamond shaped, half spear-shaped figures.

VI. This is another sand-stone, which is very little defaced by time or weather. It measures 1 foot in breadth, by $5\frac{1}{2}$ feet in length, and has evidently been the lintel of a window. At the centre there is a raised projection, pointing inwards, which, roughly speaking, may be said somewhat to resemble the club represented on playing cards, but, instead of being rounded, having five sides borne on a narrow shaft. At the top and bottom are halves of this figure. Between these figures the stone is cut slopingly downwards.

These stones are now lying in an uncared-for state in a clump of trees overlooking St. James's Green, and belonging to the Duke of Roxburghe, whose property they are. A more appropriate resting-place would be under the arches of Kelso Abbey, and thence they could be removed at very small trouble and expense.

It may be further mentioned that in 1788 other relics of ancient Roxburgh were obtained. The *British Chronicle*, published at Kelso, in its issue for October 17 of that year, gives the appended particulars regarding them:—"The workmen now employed in digging out the foundation of some religious houses which stood upon St. James's Green, where the great annual fair of that name is now held, in the neighbourhood of this town,

have dug up two stone coffins, in which the bones were very entire, several pieces of painted glass, a silver coin of King Robert II., and other antique relics. The most remarkable is a tombstone (5 feet long and 21 inches broad) in fine preservation, upon which the device is a St. George's Cross, ornamented with *fleur-de-lis*, and a pair of wool scissors at the right-hand side about the middle of the shaft; the inscription round the edge in the Anglo-Saxon character, is as follows:—‘Hic jacet Johanna Bulloc que obiit anno Dni MCCCLXXI orate p aia ejus.’ She must have died in the reign of Robert II., the first King of Scotland of the name of Stuart, who succeeded David II. in February, 1370-1, and was crowned in March. It is remarkable, his mother being killed by a fall from her horse, he was brought into the world by the Cæsarean operation, and it is said, by the unskilfulness of the surgeon, he was wounded in the eye, whence he got the name of ‘Blear-eye.’ At his accession the English were in the possession of the Castle of Roxburgh, and the town of Roxburgh was burnt in the year 1372, by the Earl of March, in consequence of one of his domestics having been killed by the English in a fray at the fair held at Roxburgh in 1371, no doubt the same fair now called St. James’s.”

A further “find” is recorded in the issue of the *Chronicle* for the subsequent week, October 24, as follows:—“Several more tombstones have been found in the ruins of the church at St. James’s Green, some of them without any inscription. Upon one, which is broke, and a part of it wanting, is a St. George and a St. Andrew’s Cross intersecting one another, with a pair of wool scissors on the right-hand side of the shaft, and an inscription, which, so far as it can be made out, is, ‘Hic jacet Alicia—L C—.’ On the pavement of the church, which consisted of small bricks or tiles, a small part of which was uncovered by curious people, some burnt wheat and barley was found, which, though reduced to a charcoal state, retained their original shape perfect and complete, and were of a large size. As the search was directed to the discovery of stones, and not of curiosities, now that the foundations have been all traced out, the workmen are employed in filling up and levelling the ground.”

[The Church of St. James, of Rokesburch, was dedicated on the 17th April, 1134. There is presumptive evidence that some of the great Scoto-Norman nobility had been buried there, from

the circumstance that, in 1246, the body of Henry de Balliol, Lord of Reidecastle, and Lord Chamberlain of Scotland, was removed from St. James', "and honourably buried in the chapter-house of Melrose." (Chronicle of Melrose, by Stevenson, pp. 124, 203). In 1426, the church of St. James was brought into so ruinous a condition by the war, that divine service could be no longer performed there. (Morton's Teviotdale, p. 112)].

An Account of Simprin, Berwickshire. By JAMES HARDY.

The most probable conjecture of the origin of the name of Simprin, is that of Chalmers, Caled. ii., p. 360. ; viz., that it is a patronymic from Simpring or Sempring, the name of the person whose settlement it was. This agrees with Kemble,* that the nomenclature of Sempringham, in Lincolnshire, indicates the *mark* of the family of the Sempringas. This *mark* is explained as being "the plot of land on which a greater or less body of free men had settled for purposes of cultivation, and for the sake of mutual profit and protection ; and it comprised a portion both of arable land and pasture, in proportion to the numbers that enjoyed its produce."†

In the reign of Malcolm IV., Hye de Symprinc, who, however, must have been cotemporary with David I., was lord of the manor, and possessed of the advowson of its church. He then, in presence, and with consent of his son Peter, gave the church of Symprinc to the monks of Kelso, with toft and croft, and eighteen acres of land, reserving the right of Thor, archdeacon of Lothian, to enjoy the revenues of the church during his lifetime. Malcolm's confirmatory charter is dated at Roxburgh in 1159, six years after he came to the throne.‡ Peter confirmed his father's liberalities, which were also approved by William the Lion ; and the entire grants were confirmed by Roger, who was bishop of St. Andrews from 1188 to 1202. About 1248, a Sir P. de Symprym witnessed a charter of Patrick Dunbar, son of

* The Saxons in England, ii., p. 472. † Ibid, i., pp. 36-37.

‡ Morton's Mon. Ann. Teviotdale, pp. 156, 160.

Patrick, second Earl of that name, of a gift of the lands of "Putanyshalwa," south of the Leit, in the barony of Hirsell, to the Priory of St. Mary of Coldstream.* In 1251, David, bishop of St. Andrews, permitted the Kelso monks to apply the whole fruits of the church to their own use, to enable them to assist the poor, and exercise hospitality to strangers. This grant was confirmed by John, the prior of St. Andrews, at the head of his chapter.† This bountiful prelate, David de Bernham, a native of Berwick-upon-Tweed it may be interesting to know, died at Nenthorn, and was buried in Kelso.‡

Somewhere about 1272-1276, the period being conjectured from dated deeds, with corresponding signatures, Walter de Simpring and Cecilie his wife, daughter of Marjorie Rede, grant a charter of a toft and croft below the village of Coldingham, to wit under Pernkinhow, to Walter, the brother of Gregory de Coldingham; and the same parties give charter of a toft and croft in Coldingham to the monks. The witnesses are Sir John Gray, Sir Peter de Morthington, Sir Henry de Prendergest, knights; John Ridel, John de Riston, Gilbert de Lumesden, and his son of the same name, and Thomas de Prendergest.§

Nothing more appears about Simprin, till the year 1298, when in an Ancient Rental of the possessions of the monastery of Coldingham, under a defective heading;—but internal evidence shews that it had been Swinton;—it is said that the vill of Sempring claims to have community in the peat-moss or turbary of the prior, but why is not known. Also, the lord of Sempring hath set to the lord of Letham a particular portion of the turbary for 10s per annum. And the said lord de Letham hath restored to the said lord de Sempring the said turbary, but is unwilling to restore the farm. The value of the whole was £21 6s.|| In that age, Leitholm in the adjoining parish of Eccles was written Letham, and its proprietor then called de Letham, appears to have farmed a portion of the Coldingham lands in Swinton, and was unwilling to quit his lease.

* Historic Memorials of Coldstream Abbey (Priory). Chart., No. xxiii.)
† Caledonia, ii., p. 360, and Morton's Teviotdale, p. 127; on the authority of the Kelso Charters.

‡ Keith's Catalogue of Bishops, p. 11., note.

§ Coldingham Charters, Nos. ccxi, ccxcii.—Raine's North Durham, App. p. 58.

|| Inventories and Account Rolls, p. lxxxv.

We next learn from a royal writ of Edward III., dated at York, 4th March, 1333-4, that the property of the vill of Simprin had become sub-divided, and this appears to have been in consequence of its being inherited by heirs female. The deed bears that Patrick de Graham de Lovet and his ancestors, were seized in their domain as of feu from the time of Alexander III., king of Scotland, of the third part of the vills of Sempryng, Daltone, and Merton.* Now, we know, that in the reign of Alexander III., Sir John Bisset of Lovat died without heirs male, and left his estate to his three daughters, of whom Mary the eldest was married to David de Graham, of the Kincardine family, who was thereupon designed Dominus de Loveth.† The third daughter was married in 1292, which furnishes a date.‡ In the reign of Edward II. or III., the aforesaid Patrick de Graham quit-claimed the third part of the above three vills to the English chamberlain for Scotland, named John de Weston; who was, however, expelled by Robert de Bruys during the War of Independence, and other tenants were instituted adverse to English interests.§ Master John de Weston, clerk, was conjunct receiver and dispenser at Edward I's Exchequer at Berwick, from 1298 to 1304, of the money accruing from lands, &c., in Scotland, and for paying the military expenses of upholding the king's occupation of that kingdom || On August 16th, 1308, in the second year of Edward II., John de Weston, clerk, is dispatched to assist Robert de Umframvill, Earl of Angus, one of the newly-appointed guardians of Scotland, in organising his department of the Government, (Rot. Scot. I., p. 56); on December 3d, he was Edward's escheter beyond the Scottish sea (p. 61); and constable of the Castle of Forfar (p. 61). In 1309, he is fixed in charge of the exchequer at Berwick, being termed in one deed as "Meistre Johan de Weston, nostre chaumbrelein d' Escoce." (p. 112). In 1315, he is directed to stay at Berwick, where his services were indispensable, instead of, as had been proposed, coming to London, to render an account of his stewardship, during his tenure of office. (p. 151). On the 17th June, 1317, he was relieved by the appointment of James de Broghton, clerk, as his successor, (p. 172). In Oct. 1318, he is occupied at York

* Rot. Scot. i., pp. 269, 270.

† Nisbet's Heraldry, i., p. 91, and Remarks on Ragman Roll, p. 16.

‡ Ibib i., p. 91. § Rot. Scot. ubi. sup. || Hist. Doc. Scot. ii., p. 365, etc.

in marshalling the king's levies from that shire preparing for the Scottish war; and has the command of the foot soldiers remaining at York, and commission to maintain strict discipline among them. (pp. 187, 188). John de Weston, the chamberlain, died before March, 1333. By Inquis. port Mortem, 9 Edw. III (1334-5) he deceased, seized of a number of tenements in Berwick-upon-Tweed, in Scotia;* but the king had already by the rescript of March 4th, 1333, empowered the Sheriff of Berwick to look after the interests of Thomas, son of John de Weston,—a priest's son, be it observed—and endeavour if he could accomplish it readily, to restore to him the third part of the three Border villis aforesaid.† We learn from Nisbet that in the borough rolls of Exchequer, Thomas Weston got £66 0s 8d from Sir Alexander Seaton, governor and steward at Berwick, as by his accounts given in the 21st Jan., 1327.‡ On the 3rd April, 1335, Thomas de Weston had restored to him the two tenements at Ravensden, in Berwick, from which his father had been evicted by Robert de Bruys, they having come into the possession of Edward III., by the forfeiture of Alexander Ridell. (Rot. Scot. 1., p. 335. His father first and he afterwards forfeited their Scottish rights, for being Englishmen. In the 16th of Robert I. (1321), William Maceoun acquired 10 librates of the land of Mertoun, which belonged to Ingeram Cnount and John de Westoun; John de Westoun and Ede Gurlay at the same period, forfeited the lands of Rutherford and Maxton.§ In the reign of David II., Jeffray Touris obtained the “forfaultrie of Thomas Westoun, in the shire of Berwick, in general.”|| This Jeffray Tours may have been a relative of the next owner of Simprin, who held it from the English crown, as appears by the Inquis. port Mortem, 43, Edw. III. (1369); John de Toures having possessed, two carrucates of land as of the honour of Dovorr', co. Lincoln, and Sempring barony in the shire of Berwick.¶ For two centuries thereafter the history of the lay-proprietorship is a blank.

In July, 1482, the English army under the Duke of Gloucester burnt among other places:—Edrington, Paxton, Fishwick,

* Cal. Inq. p. Mort. ii., p. 70. † Rot. Scot. i., pp. 269, 270.

‡ Nisbet's Heraldry, i., p. 106.

§ Robertson's Index, p. 5, Nos. 15, 16, Regist. Mag. Sigill. p. 5, Nos. 15, 16.

|| Robertson, p. 39, No. 9. ¶ Cal. Inq. p. Mort. ii., p. 299, No. 30.

Hutton, Mordington and its bastel, Edram, East-Nisbet, Kellaw, and Kemergham, the two Swyntons and the bastel, and *Simprin*, and Crossrig.*

In the time of Edward I., the church of Sempringe belonging to the Abbey of Kelso, was estimated at £12 of annual value, as a subject of Papal taxation.† In the Rent Roll of the Abbey, there were at Simpring two oxgangs of land, which produced one merk per annum; and the church for the Abbey's own use, was valued at £10 per annum.‡ In 1630, the Earl of Roxburgh, accounted for his relief, as from the Abbacy of Kelso, to the minister of Simpren, 2 chalders; and as teinds one chalder; while Sir James Durham of Duntarby, drew a pension of 5 chalders, "furth of the teyndis of the kirks of Langton and Simpreme."§

After the Reformation, Simprin had been bestowed on William Maitland, the politic Secretary of Queen Mary; and after him on his brother, Sir John Maitland, subsequently Lord High Chancellor of James VI., who for a time held the main part of the estates of Kelso Abbey *in commendam*, but before 1565-6 had exchanged the commendatorship of Kelso, with Francis Stewart, afterwards Earl of Bothwell, for the Priory of Coldingham.|| At that unsettled period courtiers had a constant struggle to retain their newly-acquired preferments or lands, against rival intriguers. In 1581, Sir John Maitland is specially, by Act of Parliament, dispossessed of the lands of Simprin, in favour of Alexander Hume of Manderston, and Alexander, Commendator of Coldingham, his son, both partisans of the upstart favourite, the Earl of Arran. They obtained "all and hail the landis of Symprene over and nether toftis with thair pertinentis," "as be cum in his hienes handis be reasoune of foirfalture ordourlie led and deducit agains vmquhill William Maitland sumtyme apperand of Lethingtoun, and John Maitland sumtyme priour of Coldingham, his brother, for certane crymis of treasoun and lesemaiestie commitit be thame quarof they wer convict in Parliament, as the proces led and deduceit thairupon proportis."¶ Manderston entered possession; and his son David Hume, called Cranshaws

* Hall's Chron. fol. 54. † Coldm. Account Rolls, p. cxv.

‡ Morton's Teviotdale, pp. 127, 128, 169.

§ Ibid, pp. 173, 178, 179. || Ibid, p. 104.

¶ Acts Parl. Scot. iii., pp. 270, 271.

(perhaps from having a lease of that place), as we are informed by David Hume of Godscroft, tried to stir up strife at Simprin.* Sir George Hume of Wedderburn, Godscroft's eldest brother, at the instigation of Manderston, was then under suspicion of being adverse to the government, remanded to Perth in a sort of banishment, which necessitated his estates being committed to Godscroft's management. Ramrig then appertained to Wedderburn, and there was a pendicle of debatable land between it and the Swinton property, in dispute betwixt him and George and John Swinton. David of Cranshaws now preferred a right to it, also, as a pertinent of Simprin; and prepared to intrude himself into possession; but David of Godscroft becoming aware of his designs, wrote to the husbandmen of Ramrig not to permit it; and that he himself if need were, would come to their support; and at the same time he charged his brother's vassals to arm; and leaving Edinburgh, proceeded to Langton, and obtained from his sister, the lady of Sir William Cockburn, the promise of being strengthened by her husband's dependents likewise to resist the encroachment. Cowed by these precautionary measures, Cranshaws desisted; and by the importunity of Godscroft, Wedderburn was soon afterwards released, to superintend his own affairs.† On the 10th September, 1584, his disturber Cranshaws, *alias* "Davie the Devill," was slain by the Earl of Bothwell. "Upon the tenth of September, the Erle of Bothwell, accompanied with fortie horse, invaded David Hume, sonne to the goodman of Manderstone, and shue him."‡ Meanwhile, whether Bothwell, as commendator of Kelso regained Simprin, and it was involved in his forfeiture in 1592, and annexed to the Crown, is uncertain. When Godscroft composed the History of the House of Wedderburn in 1611, he incidentally states that Bartholomew Hume (or Home) was then a proprietor in Simprin. This Bartholomew, he narrates, was the third in descent from Bartholomew, 8th son of David, third of the name, but fourth as proprietor of Wedderburn. His grandsire having gone into Clydesdale, settled and acquired some landed property there.§ In

* According to Godscroft, Cranshaws had received Simprin, from the Treasury; "*Simpriniae, quam dono a fisco accepit.*"

† Godscroft, *De Familia Humia Wedderburnensi*, pp. 75, 76.

‡ Calderwood's Hist. iv., p. 260; and viii., p. 275.

§ Godscroft, p. 19.

1588, among the “professed Papists” of the age, was reckoned “Bartill John in Simprein,” who may have been Bartholomew, the grandson’s, son John.* At the date of May 30th, 1605, a Bartholomew Home becomes the heir of George Home in Horneden, his father, in the moiety of three husbandlands in the town and territory of Horneden, and the privilege of digging “lie dayis wark of truffis,” annually on Hutton moor.† This may, or may not, be a separate individual, as we have only the name, and the peculiarity of a divided property as a guide; and the inheritance at Simprin at the same time ranking also as a subdivision. June 15, 1626, Jasper Home becomes heir of Bartholomew Home *portioner* of Symprene, his father; in 4 husbandlands out of the 10 husbandlands of the Kirklands of Symprene, within the vill and territory of the same; valued at £4 6s 8d.‡ The Homes continued as small lairds there till about 1699, when the Rev. Thomas Boston occupied as a temporary residence, what had been their dwelling. Dec. 7. “The manse being in ruins, I settled in an old house in the west end of the town, formerly belonging to Andrew Home, sometime portioner there; and there I dwelt till toward the latter end of the year 1702.” The house was in such a pitiful condition, that one night in Jan. 12th, 1700, during a boisterous wind, Boston was obliged to quit his own bed, and betake himself to his father’s, lest the apartment should collapse.§

I cannot fix the precise period when the Cockburns of Langtoun became landholders in Simprin; but on May 21st, 1629, Sir William Cockburn of Langtoun, knight baronet, became heir of Sir William Cockburn of Langtoun, his father, in the lands and barony of Langtoun; and likewise the 10 husbandlands in Sympring—The Kirklands; the latter estimated at £10 of feu-farm; and 20s in augmentation.|| His widow, Dame Helen Elphinstone, 5th daughter of William 4th Lord Elphinstone, and relict also of Mr Henry Rollock, minister in Edinburgh, had received from her first husband, Sir William Cockburn, a life-rent of a division of his lands under her own distinct control. In 1648-9, this lady and her tenantry of the parishes of Simprein and

* Calderwood, iv., p. 662.

† Inquis. Ret. Abbrev. Ber. No. 57. ‡ Ibid, No. 149.

§ Boston’s Memoirs, pp. 87, 98.

|| Inquis. Ret. Abbrev. Ber. No. 166. The Cockburns may have had a Crown charter of lands, other than ecclesiastical, in the parish, of an early date.

Langtoun, were sore distressed by the quartering of soldiery upon them, and other oppressions, which she set forth in a petition to Parliament, and for which she obtained an act of recompense in her favour, June 13th, 1649. Her supplication declared that "shoe and hir tennents are redacted to great straits and extreame povertie, what throw quarterings and uther burdings susteined be them, these diverse zeires bygone, bot cheiffie since the last unlawfull Ingadgment against England, by the plunderings of the forcis that wer upon the said Ingadgment, quhilk not onlie quartered themselfis upon the landis pertaining to hir within the said paroschis, bot took money also, horses, mears and uther goods pertaining to hir said tennents, to ther great loss and prejudice, as the particular acompt of the samyne quarterings and lossis subscriyvit be the minister and elders of the parosche will testifie." The Estates recommended a payment of £34,147 12s 4d in settlement of all claims.* The Engagement was the unfortunate expedition into England, undertaken by the Duke of Hamilton, in the cause of Charles I. It came to an ignominious termination in August, 1648. Concerted by a party, it displeased the majority of the nation, and was effected with forced levies. "They that did not give ready obedience to the act of levy were quartered on, until by themselves or others, their proportions were put out. Thus many honest men in Fife and Lothian did sadly suffer."† Among others, Mr Patrick Gillespie, in Simprein, who may have been a tenant of the Cockburns, had reason for complaint. "Major William Sharpe being gone on in the late unlawful Ingadgment sent his quarter mr. to his house, who did plunder it, and tak away his horss," which "damnified and skaithed," Gillespie to the worth of "Two hundreth markes." On a petition to Parliament in 1659, Major Sharp was ordained "to restor and delyuer Patrik Gillespie the samyne horse takin away be the said Major Sharp his order or els to pay the soume of fourscore pundes as the pryce."‡ He thus prevailed in the meantime, but in retaliation, when Charles II. was restored, Gillespie was one of those singled out, as being an active favourer of the usurping government, and therefore excepted from the king's indemnity, and made liable to a fine. In Middleton's

* Acts Parl. Scot. vi., Part ii., pp. 483, 484.

† Life of Mr Robert Blair, p. 202.

‡ Acts Parl. Scot. vi., Part ii., p. 453.

Parliament, 1662, Patrick Gillespie in Simprein, was appointed to pay, "Three hundreth three score pund" (£360).* The sentiment of the great body of the ministers, was also in contrariety to the Engagement. Mr Patrick Melvil, minister of Simprin, narrowly escaped being assaulted by a soldier, for having, as he thought, said something against that enterprise.

December 10, 1657, Sir Archibald Cockburn of Langton, succeeded his father in the Kirklands of Simprein.† Sir Archibald—a representative of Berwickshire in Parliament, and the holder of a variety of public offices—was a man of considerable ability and resource, but undertaking improvements of his estate beyond his means, he fell bankrupt about the beginning of 1690 ;‡ and becoming hampered with lawsuits and decreets of session against him, he was never able for the rest of his lifetime, although protected from time to time by the Estates of Parliament, to extricate himself from his involvements. Before 1681, he had made "great and considerable enclosures at Langton."§ Although drowned in debt, he was confident, when affairs were at their worst, in his power to do justice to all concerned, and reports that none "were so able to demonstrate his manner of improvement of land so well as himself."|| "Such is the condition of his estate by reason of the singular improvements that he hath made thereof, that it cannot be better manadged than by allowing him the administration and manadgment thereof."¶ The Court of Session caused the estate to be roupd for terms of years, and ordained placards and intimations to be published at the adjacent church doors, and that the highest bidder should obtain the tack. Undaunted, he outbids the public by a large advance, and obtains the lease ; or he associates himself with a person of means, and keeps himself at the head of affairs. The annual rent of the two estates was 24,000 merks.** Once he is incarcerated by certain creditors in the Tolbooth jail, in Edinburgh, "but made his escape that night the rabble broke up the prison on the 20th of June, 1700."†† It was he who possessed the whole parish of

* Ibid, vii., p. 422. In Wodrow's List, Hist. of the Sufferings, &c., vol. i., p. 272, this is perverted into "Patrick Gillespie in Stemprenzeze."

† Inq. Ret. Abbrev. Ber. No. 308. ‡ Acts Parl. Scot. ix., p. 479.

§ Ib. viii., p. 246.

|| Fountainhall's Decis. i., p. 107.

¶ Acts Parl. Scot. ix., p. 184.

** Fountainhall's Dec. i., p. 640, etc.

†† Fountainhall's Dec. ii., p. 107.

Simprin, when Mr Thomas Boston became minister, 21st Sept., 1699. Boston doubted that the laird would not be capable or mindful to provide the ordination dinner, but was agreeably disappointed, to find "a decent entertainment" ordered.* Boston's parishioners were Langton's servants; proving that he farmed the land himself. The capacious barns at Simprin were perhaps his contrivance. Girnels as repositories for grain were one of the features of the farming of that age. Sir Archibald died in 1705, and was succeeded by his son, Sir Archibald Cockburn, who had enjoyed the title in his father's lifetime, having got a charter from James VII., in 1686.† By becoming caution for his father, and on his own private account, he was obliged to apply for personal protection from creditors, which parliament conceded in 1696.‡ In 1698 he was a reputed bankrupt, although he neither retired to "the Abbey," nor was under diligence.§ He was an advocate by profession. On his decease, without issue, the title devolved on his brother, Sir Alexander. He too had his share of the family embarrassments; Parliament, May 2d, 1703, having granted a warrant of protection from his creditors, to Capt. Alexander Cockburn. He was a gallant soldier, and fell at the battle of Fontenoy, May 12th, 1745. He was followed by his grandson, Sir Alexander, on whose decease the title devolved upon his cousin, Sir James Cockburn, who was M.P. for Peebles, in 1762.||

The Cockburns being unable to retrieve their affairs, the estate of Simprin was sequestrated, and purchased by Patrick, 5th Lord Elibank, for £18,000.¶ This witty, learned, and accomplished nobleman had studied law, had served in the army, having accompanied the expedition to Carthage in 1741, and was possessed of great conversational powers. He and Dr Samuel Johnson mutually held each other in respect, and Johnson had a very high opinion of him. Johnson paid him the high compliment; "I never was in Lord Elibank's company without learning something." Lord Elibank was the early patron of Dr Robertson, the historian, and Mr Home, the author of "Douglas,"** The best retort on Johnson's definition of oats being the food of men in Scotland and of horses in England, is that of Lord Elibank;

* Boston's Memoirs, p. 76.

† Acts Parl. Scot. vii., pp. 481, 632, 633.

‡ Ibid, xi., p. 14.

§ Ibid, p. 43.

|| Burke's Peerage, &c.

¶ Sinclair's Stat. Acc. vi., p. 329.

** Boswell's Johnson, and Tour in the Hebrides.

“Yes,” said he, “and where will you find *such men and such horses*?”* His publications are now little known. He and Sir Hew Dalrymple each claims the merit of being the first to introduce the practice of hollow-draining land.† “The most conspicuous object in Simprin is the very high and spacious barn built by the Cockburns, consisting of a thrashing-floor, and large and lofty granaries. Lord Elibank thinking its height exposed it to storms, lowered the roof considerably, but left the gables standing, so that they still shew the original altitude of the building, which is seen from every part of Berwickshire.”‡ Lord Elibank died, Aug. 3d, 1778, in the 76th year of his age.

Patrick Murray, Esq., of Simprin and Meigle, in Forfarshire, natural son of Lord Elibank, was the next proprietor. When a young man he was an intimate friend of Sir Walter Scott, and a group of other youths of high birth and connections, remarkable in early life for their eminent qualities. Mr. Murray had an enthusiastic passion for military antiquities. Scott visited Meigle in 1793, and spent there many happy days. Simprin was then fond of histrionic diversions, and was a member of *The Club* of that early period.§ The Forfarshire Simprin, so named from Simprin, in Berwickshire, is near Meigle, but in the parish of Airlie.|| Mr. Murray lived many years in Meigle house, and subsequently in Arthurstone. I have not the date of his decease; but he was “very much esteemed as a nice country gentleman of the old school.”

About 1832, Sir John Marjoribanks, of Lees, bought the estate of Simprin. Sir John made the purchase on his own account, but the property was by arrangement conveyed to his son, Charles Marjoribanks, Esq., M.P. for Berwickshire; who left it to his brother David, subsequently Lord Marjoribanks of Ladykirk.

Simprin has a peculiar claim upon the Club, owing to Dr. George Johnston, its originator, having been born there, July 20th, 1797. His father then farmed the place, but soon after the family removed to Ilderton, in Northumberland.

* Sir Walter Scott in Croker's Notes to Boswell. † Caledonia, ii., p. 492.

‡ Sinclair's Stat. Acc. vi., p. 329.

§ Lockhart's Life of Sir Walter Scott.

|| As will be observed by the citation of original authorities throughout this Paper, *Simprin* is the predominant mode of writing the word; there being only a few examples of *Simprim*.

At the Reformation, the Ecclesiastical history of the Parish, becomes separate from the Civil. For this section I am mainly indebted to the Rev. Hew Scott's list in the *Fasti Ecclesiæ Scotticane*, to which I have added particulars from other sources. By the arrangement of 1574, Fishwick, Swinton, Whitsome, and Simprin were united. "Sempreyn," then vacant, was to be supplied by a "reidare"; and the emolument was "1 ch. victuale, etc."* Thomas Watson was reader in 1576; and James Sympton from 1578 to 1580.

MINISTERS.

1. THOMAS BONER, A.M.; located at Auldcambus in 1599, and continued in 1601; was presented, 7th Feb. 1606, by James VI., to the vicarage of Simprin and Auldcambus; he died before April 7th, 1632.

2 JOHN MACMATH, A.M.; laureated at the University of Edinburgh, July 24th, 1619; was presented to Simprin by Charles I., April 7th, 1632. He was deposed by his Presbytery, Sept 4th, 1638; and the sentence was approved, and ratified by the General Assembly, Dec. 11th, for teaching Arminian doctrines;—"prayers for the dead, invocation of saints, Christ's local descent into hell, the damnation of children without baptism; declaring he wou d say mass if the king commanded it; and for deserting his flock, and declining his presbytery."† In Peterkin's "Records," he is called McNaught, and all the authorities mistaking his presbytery for his charge, style him minister of Chirnside; whereas Mr Alexander Smyth continued there till June 3d, 1645. On June 21st, 1661, Mr John McMath, minister at the kirk of Simpren, being one of those "known to have been weele affected and loyal persons, and great sufferers for the king," had £100 sterling allotted to him by Parliament, to be paid out of the Vacant Stipends.‡

3. ROBERT MELVILL son of Sir James Melvill of Halhill, Fifeshire. In Nov. 1629, he was assistant to Mr Robert Colvill, minister at Culross. He was strongly opposed to episcopacy, and one day took occasion to attack the bishop of Dumblane, from the pulpit, who, in a more Christian frame than himself had gone to listen to him, having heard "much of his learning, zeall, painfullnesse." For this affront, the bishop "discharged him to preach againe. yit shortlie after, he was content to oversee and misken him, albeit said he) I know the rest of the bishops will be discontent with me"§ He was admitten to Simprin previous to Oct. 14th, 1641, when he was presented by Charles I. He made his will, dated at Sempreng, September 9th, 1644, being then "sent furthe to serve in my calling to the Armye lyinge about Newcastle"|| In this expedition, he incurred a debt to Mr Alexander

* Wodrow Miscellany, p. 373.

† Stevenson's Church Hist. p. 337, Baillie's Letters, i., p. 138, Gordon's Hist. of Scots Affairs, ii., p. 143, Peterkin's Records of the Kirk, p. 172.

‡ Acts Parl. Scot. vii., Append., p. 78.

§ Row's Hist. of the Kirk, pp. 349, 350. Stevenson's Hist. p. 117.

|| Scottish Journal of Topography, etc., ii., pp. 205, 206.

Henderson, of 200 merks, which was still undischarged, Nov. 9th, 1646.* The reader, George Davidson, may have partly supplied his place during his absence. In 1648, he escaped being struck by a soldier, for having, as he thought, said something against the Engagement. He died between 1652 and August 25th, 1654. His insicht gear was estimated at £13 6s 8d; and the inventory and debts at £3312 4s 4d. His substance he left to his relict Katharine Melvill for her own use, and for the use of their children, John and Margaret, to be equally divided after her discretion. He appointed his son "to be put to the scole of humanitye for a yeer or half yeer, either at Edinbr or St. Androse;" and, "if he be found to profit, I uold have him pass his cours' at the Old College of St Andrews. He also assigns a portion conditional on her behaviour to their kinswoman Christian Melvill whom they had brought up. "George Synklar, sone to the Laird of Wasseter, and George Davidson reader at Symprenge," are witnesses; and John Home also appends his name.† It is possible that on the change of Government, in 1660, his predecessor, McMath, may have been restored; which may partly account for the long vacancy that ensues.

4. JAMES GIBSON A. M., acquired his degree at the University of Glasgow, in 1657; he died 2nd March, 1668, aged about 32, leaving a widow. Very recently, the Rev Robert Paul of Coldstream, kindly visited Simprin Church yard on my behoof, and found Gibson's tombstone, with the inscription almost obliterated; but after getting it washed, he was enabled to read as follows:—

"Hic jacet Mr Jacobus
Gibson pernuper
sacerdos ecclesiæ Sim-
prinensis qui obiit
2º Martii Anno
Domini 1668."

Mr Paul remarks that the use of the word "sacerdos" is unusual on the tombstone of a Scotch minister, and is indicative of the troublous times during which Gibson officiated at Simprin. It certainly is a notable example of "priest writ large."

5. JAMES SANDERSON, A. M., graduated at the University of Edinburgh, July 27th, 1663, was licenced by George, Bishop of Edinburgh, Jan. 2nd, 1666; was ordained and collated to Simprin, Oct. 22d, 1668; and after only three years ministry, died in June, 1671, aged about 28. His utensils were estimated at about 10 merks; and his free gear, &c., at £142 5s 8d. By Bessie Crow, his spouse, he left Robert and Isobel, "little children." He was a native of Coldstream, where, says the Rev Hew Scott, he succeeded to houses and lands by birthright. Mr Paul cannot now trace the name in Coldstream parish, but "Sanderson" is mentioned in Armstrong's map, as the proprietor of a small place—"Whiterigg"—in the neighbouring parish of Eccles. This place, now *Whitrig*, is close to the boundary of both parishes.

* Hetherington's Life and Times of Henderson, p. 662.

† Scottish Journal, *ubi supra*.

6. GEORGE WILSONE, formerly of Killallan in Renfrewshire, was collated to Simprin, Sept. 12th, 1672; and translated to Westruther in 1683.

7. JAMES ADAMSON, was deprived by the Privy Council, Sept. 3rd, 1689, for not reading the proclamation of the Estates, and not praying for their Majesties, William and Mary, but for James VII.*

8. JOHN MOIR, schoolmaster of Wemyss, having acknowledged his sin in taking ordination as a deacon under Episcopacy, was licenced by the Presbytery of Kirkcaldy, July 14th, 1691; called in September, and ordained December 24th of that year. He died two or three years after. Elizabeth Areskin, his relict, had £30 allowed her by the Synod out of the Centesima fund, in April, 1700.

9. THOMAS BOSTON, A.M., was born in Dunse, March 17th, 1676. His grandfather, Andrew Boston, came from Ayr to Dunse, and possessed household property in the town, one tenement whereof descended to John Boston, the father of Thomas. He was educated under Mr James Bullerwall from 1684 to 1689. While still a youth, he attended a Presbyterian meeting at Whitsome Newton, where Mr Henry Areskine, minister at Cornhill, and afterwards of Chirnside, preached; and he also frequented a meeting-house that Mr Areskine had at Revelaw, "near about four miles from Dunse." In 1691, he was employed at Dunse, by Mr Alexander Cockburn, a notary, and then acquired the style of composing and drawing papers, which he afterwards turned to advantage. He entered the University of Edinburgh, Dec. 1st, 1691, where he studied for three successive seasons; and took his degree, July 9th, 1694. His College expenses were less than £11 sterling. In 1695 he was parochial schoolmaster at Glencairn for one month, and then became tutor to Andrew Fletcher of Aberlady, a boy of nine years of age, and in charge of him proceeded to Kennet, Clackmannanshire, the mansion of Lieut.-Col. Bruce, who had married Aberlady's mother. He was licenced by the united presbyteries of Dunse and Chirnside, June 15th, 1697; called to Simprin, August 11th, and ordained Sept. 21st, 1699. The stipend was five chalders of victual and 80 merks. Simprin was the smallest parish in Berwickshire. On his first night at Simprin, he says, he felt "a desire to be very remote, and in an inconsiderable post, and even a kind of content to be posted there;" but then to occupy "such a mean place," and "the prospect of a small congregation," was very disheartening; and this was aggravated by "the unbeseeing carriage of the people, few as they were, partly by sleeping, partly by going out." Besides, the two elders who proposed his settling with them, "seemed not to be very pressing." He was, however, induced to accept the little charge, and did not regret his determination. At the ordination he had no heritor, nor representative of a heritor, to take him by the hand. At the outset he visited the school, which shows there was one, and afterwards the town, and found "there was some need for it." In one instance on a Saturday night, his meditations for the morrow were much disturbed. "Towards the time of going to bed, I heard an unsavoury noise of men drinking in a neighbouring house, on the occasion of a wedding in view. After waiting a while, and finding they were not dismissed, I went

* Peterkin's Constitution of the Church.

out, and meeting with the master of the family, shewed him the evil of that unseasonable practice." When he was desirous of friendly intercourse, he resorted to Kersfield (now Milne Graden), the house of Lady Moriston; "and by the help I had to season converse there, I was more encouraged to enter on company." Weary of travelling weekly to and fro from Dunse, he determined to settle at Simprin, which he accomplished, Dec. 6th, bringing his father to reside with him. The parish contained in all 88 examinable persons; and he regularly catechised his flock. "In the winter-season, our meetings for it were in my house, and in the night; in the summer they were in the kirk, at the time of the day wherein the men rested from their labours; for the people were servants to Langton." In this exercise "he had many a sweet and refreshing hour." In his visits he sometimes "found great ignorance prevailing." For those wishing baptism for their children, who were "grossly ignorant and hardly teachable in the ordinary way," he drew up a small catechism for their private instruction. Twice every Lord's day, he preached winter and summer; and he had also a sermon weekly in the kirk. On June 17th, 1700, he married Katherine Brown of Culross, whom he extols as a woman of many virtues. Medical practitioners were then scarce, and she became "remarkably useful to the country-side, both in the Merse and in the Forest, through her skill in physic and surgery." For a time he and his wife had submitted to the wretched accommodation of the old dwelling, in which they set up housekeeping; but in the end of the year 1700, "the winter being begun, we removed into the new manse, built for me from the foundation, and by that time covered; but little of the wright's work within it was then done; but it was a-doing through the winter. The ground whereon it was built, being quite new, we were obliged at first to straw the floor of our bed-chamber with shavings, which was afterwards laid with deals. The hardships of entering the new house, we preferred to suffering the inconveniences of the old. Langton's estate going then from hand to hand, it was not without considerable difficulty, and expence too, that I got that house carried on. Afterwards I formed a large garden, and built the dike; the which was a work of some time, trouble, and expence too." On April 13th, 1701, he lost his father, in the 70th year of his age. "His body lies interred in the churchyard of Simprin, in the burial place of the ministers there." In October, 1701, Boston was elected Synod Clerk, which helped to amend his limited salary. The clerkship yielded £100 Scots *communibus annis*. This office he demitted in April, 1711. When Boston settled at Simprin he had very few books, which occasioned him to borrow, as he had access. In the first year of his ministry, as he was sitting one day in a house in Simprin, "he espied above the window-head two little old books," one of them the first part of the "Marrow of Modern Divinity," which had been brought from England by the master of the house, a veteran of the period of the civil wars. The Marrow, Boston "relished greatly, and having purchased it at length from the owner, kept it from that time to this day." Having "digested the doctrine thereof in a tolerable measure;" he began to preach it; and it gave his sermons "a certain tincture which was discerned." The republication of this book, formed an era in Scottish

theology, and occasioned a violent controversy, and those who adopted its views were called "Marrow-men." The circumstances of its origin at Simprin are worth knowing. Boston's first sacrament at Simprin, on the 2nd of August, 1700, was administered in the kirk, but thereafter and except in winter, it was "celebrated without doors." Simprin large barn appears from his Session Records to have been used regularly by him upon sacramental and other extraordinary occasions.* He preached his farewell sermon out of one of the barn doors, to a great multitude of people. His winter-communions, he reckoned his "haleyon days," and intercourse with those worthy Christian people he gathered round him, must have greatly refreshed him; for the Merse, in his estimation, was "then an overgrown piece of the vineyard." It is said that the people at this time were very wild and irregular. In a homely elegy on Boston's death, he is represented as "a rose upon a thorn," blooming as it were, amidst a brake of brambles and thorns.† Mr Boston was translated to Ettrick, March 6th, 1707. His "Fourfold State," and his many other writings, which gained a general acceptance throughout Scotland, were then unwritten.‡ The Session Register of Simprin, commenced 21st September, 1699, the day of Mr Boston's ordination, and continued during his incumbency, is still in preservation, and is wholly in his own handwriting.§

10 JAMES ALLAN, a near relation of Professor John Simson of Glasgow, --(that Professor Simson whose unsound utterances kept the General Assemblies in a ferment from 1715 to 1729,)—studied in the University of Glasgow; was licensed by the Presbytery of Dunse; called to Simprin, July 10th, and ordained Sept 23rd, 1707; and translated to Eyemouth, Feb. 28th, 1716

11 JAMES CHRYSTIE, A.M., graduated at the University of Edinburgh, April 2nd, 1705; and was licensed by the Presbytery of Kelso, March 27th, 1712. He was presented to the 2nd charge in Dunfermline in Sept. 1716; but being called to Simprin in October he was presented by the Presbytery, *jure devoluto*, on the 6th November following, and ordained the 19th March, 1717. He was presented a second time to Dunfermline in October, 1717, but owing to the opposition entertained against him the call was set aside by the Commission of Assembly in March, 1718. On May 14th, 1722, he preached before the Assembly.|| Mr Wodrow says he was a "youth of a very good character.¶" He was presented by the Duke of Roxburghe to Morebattle in 1723 "The heritors were for him; all the elders but one were against him; the people were mobbish and irregular, and thus it continued for a year. Thirty heads of families and heritors petitioned for him, and he was transported by the Presbytery of Chirnside. At the serving of the edict, there was another mob; and at his settlement a still greater" He was admitted

* New Stat. Acct. of Berwickshire, p 192, note.

† George Henderson.

‡ See Memoirs of the Life, Time, and Writings of the Reverend and Learned Thomas Boston, A.M. The Edition quoted is that of Berwick, 1805.

§ New Stat Acct, p. 192.

|| Wodrow's Correspondence, ii, p 664

¶ Ib. iii., p. 203.

at Linton, March 4th, 1725. "The presentee turned out another man than the parishioners had anticipated, and a highly consistent and Christian deportment in the course of years caused the asperities of his settlement to be forgotten.*" Mr Chrystie was married to Sarah, daughter of Mr Gilbert Laurie of Hutton. He lived respected and died regretted.

12. JAMES LANDRETH, A.M. Having graduated in the University of Edinburgh, April 12th, 1715, he became chaplain to Sir James Stewart of Goodtrees; was licensed by the Presbytery of Hamilton, May 26th, 1724; called to Simprin, Sept. 16th, and ordained Sept. 23rd, 1725. He was also Synod Clerk. Dr Carlyle tells how the merry company of clergymen, who in February, 1775, escorted Mr. John Home across the borders, to try the fortunes of "Douglas" in London, contrived to borrow Mr Landreth's saddle-bags used for the carriage of the Synod's documents, to ensure the safety, as far as Wooler-Haugh-head, of the precious MS. of that production, which Home, with habitual carelessness, had stuffed into the pocket of the great-coat in which he rode. At the same time, Mr Cupples of Swinton, who never had any money, contrived to borrow half-a-guinea from his neighbour, Mr. Landreth, to defray the expence of the excursion.† Mr Landreth died unmarried, Oct. 3rd, 1756, in his 65th year. The inscription on his tombstone, has been carefully copied for me by Mr Paul. "*Hic conduntur reliquiae verecundi et eximii viri Jacobi Landreth verbi Dei apud Simprin Minister Qui 4 Nonas Octobri 1756 Ætatis 65 Ministerii vero 31 animam efflavit. Hunc pietas haud fucata fidelitas et diligentia in munere perfungendo integritas incorrupta Prudentia Charitas et Philanthropia deniq: ardens veris ornarunt laudibus memoriam summo dignitatem honore posteris tradunt.*"

Mr Landreth is reported to have kept for a long time a Sabbath-school for children, which was celebrated throughout Berwickshire for its good effects, and was one of the earliest established.

13. JOHN JOLLY was licensed by the Presbytery, June 4th, 1757, presented by George II., in March, and ordained May 12th, in the same year. He was translated to Coldingham, Aug. 25th, 1761.

When Mr Jolly left, Swinton and Simprin became one parish by annexation.

When Mr Paul visited Swinton lately, he endeavoured to decipher inscriptions on two other tombs "in the burial place of the ministers," but failed. He writes, "I got the earth and dirt removed off two stones, which lie between Gibson's and Landreth's stones. Both of these have been covered with inscriptions, but they are wholly illegible, save the words: "In Reverendum et clarum virum Magist;" on the one next to Landreth's;

* *Ib.*, pp. 203, 204. Note to Robert Davidson of Morebattle's Poems, p 225; the traditions regarding the event, being embodied in his verses, entitled "The Ordination"

† Carlyle's Autobiog. pp. 362, 303. Mackenzie's Life of Mr John Home, pp. 36, 37.

and the words "Memento mori" on the top of the one next Gibson's, which has also a skull or hour-glass, and a spade and cross-bones on it in high relief. The tops or heads of both these stones were quite covered with a foot and a half of soil, to which these words owe their preservation. Of Boston's father's tomb, I could find no trace, nor indeed did I come on any other tombstone worthy of notice in the churchyard. All the four stones alluded to lie (evidently *in situ*) horizontal with the ground. The man who was with me at Simprin, and who lived there, told me that on one stone close by the south side of the church, there used to be a brass plate, with D. L. upon it—which plate was wrenched out, some years ago, and stolen—no one knows by whom." At the Club's visit, an inscription on a stone lying at the end of the church, was copied to the following effect ; but of the man himself we know nothing.

"1610.

Heir lyes under this ston
the body of Willeam
Cooekburn whos dayes
was feu. his glass it
was soon run. al that
him knew their lov
he wan who departed

July 28."

The church has been a small oblong structure, without any peculiar feature. In Armstrong's Map of Berwickshire, published in 1771, Simprin church is entered as "Kirk in ruins." It only ceased to be used in 1761 ; so that its dilapidation must have been rapid ; only ten years. The manse which Boston had built, was still standing, a few years before the last Statistical Account was written, in 1834.* It stood in the garden, and a built up gateway in the churchyard wall, is shewn as that through which Boston, who enjoys quite a monopoly of local fame, passed to and from the church. Even the cow-house used by Boston, who refers to it in his "Memoirs," claims a passing mention for his sake ; and the gamekeeper's cottage close beside it, still contains his study door. The "Manse-well" still yields a refreshing supply ; much prized from the difficulty of obtaining pure water in the neighbourhood.

* p. 192.

Notice of the Orchard of Coldstream Priory, and the Origin of the Auchan Pear. By JAMES HARDY.

ON two recent visits to Coldstream, I have felt much interested in Mr William Cunningham's orchard, which contains many old fruit trees, in a healthy productive condition; but a principal reason for attention being called to it, is because it represents the Pomarium of Coldstream Priory.* It was in existence as early as March 27th, 1296, when great damage ensued in consequence of the encampment of Edward I's invading army on the Priory grounds, for which its inmates obtained a subsequent writ of indemnity. Then the orchard of Coldstream (le pome de Caldstream) used to be worth annually in common years 100s., "exclusive of the consumption of the house." The destruction of the orchard could not be calculated by the valuers, wherefore it was left to the arrangement of the king's council.† In 1621, on the resignation of the Priory lands to Sir John Hamilton, of Trabroun, it is termed the "Litle Croft, callit the lyttle orchard.‡" This might imply that there was elsewhere a more extensive area devoted to fruit trees; but in the first and latest notices of it, the word is singular, and it may have been the croft that was *little* and not the orchard. In Oct. 23rd, 1640, it is indicated as being the Little Croft called the Pomarium; (parvam croftam nuncupatam Pomarium.)§ It was then the property of the Earl of Haddington. The present Earl is the superior, through an intermediary. Its extent is about two acres. Mr Cunningham informs me that the Pears which it contains are the Bergamot, the Drummond, the Auchan, the Lammas, Jargonelle, Hessel, Green Pear of Yair, Bell-tongue, &c. The Apples consist of Queen of England, Codlin, Paradise-pippin, Strawberry-pippin, Thorle-pippin, Lemon-pippin, Red Astrachan, Hawthornden, and one or two other varieties. Situated partly on a slope, it commands a delicious view of the windings of the broad river, its finely wooded banks, and the fair bridge that clasps the once hostile shores, so quiet and peaceful now.

* Although a small book has been privately printed, entitled "*Historic Memorials of Coldstream Abbey*," not the less is it true, that this was not an *Abbey*, but a *Priory*, presided over by a *Prioress*.

† Documents Illustrative of the Hist. of Scotland, vol. ii., p. 33.

‡ Act. Parl. Scot., vol. iv., p. 648.

§ Inquest. Ret. Abr. Berwickshire, No. 235.

In a return for the purpose of a papal taxation of Scotland, of the early part of the reign of Edward I., Coldstream Priory is the only ecclesiastical establishment of that period that derived a revenue, however small, from the disposal of the produce of its gardens,—“*Exitus ortorum ijs. iiijd.*”*

Having again the occasion of referring to our Border Fruit-trees, I take the opportunity of explaining the origin of the name of the Auchan Pear, which formerly escaped me. It is contained in the following extract from Sir John Sinclair’s *Statistical Account*, (Parish of Dundonald), vol. vii., pp. 619, 620.

“Opposite the village and castle of Dundonald, in Ayrshire, is a very beautiful bank of wood, upwards, in most places, of 100 feet in height, and extending near a mile to the north-west. In a grand curvature of this bank, and on a gentle eminence, stands the house of Auchans, for a long period the residence of the Wallaces of Dundonald. About 1640, the estate came into the possession of Sir William Cochrane of Cowdon, knight; who was afterwards created Earl of Dundonald. Since the beginning of this century, the estate has been the property of the Earl of Eglintoune. At the Auchans, are the remains of a small orchard which was once in high reputation. The Pear, known in Scotland by the name of Auchans, derived that name from this place. The tree came originally from France, was planted in this orchard, grew to a great height, and was, not long ago, blown down by a storm.”

This was written by the Rev. Robert Duncan about 1793. Like many other fruit-trees, this does not ascend to the period of the monks, but indicates a progressive adoption by cultivators of new varieties, according as they came into vogue.

* Correspondence, &c., of the Priory of Coldingham, App., p. cxiv.

Notes of some Captures of Coleoptera in East Lothian. By
ARCHIBALD BUCHAN-HEPBURN, Esq.

PART II.

THE district within which I took (with very few exceptions) the insects mentioned in this Part, and in Part I., is an extremely small one; its outside limit being a line drawn from Dunbar links to Presmennan lake, from there to East Linton, and lastly to the sea shore at Tynningham sands.

Naturally this district will supply a very small portion of the Coleoptera of East Lothian; though owing to the peculiar nature of the ground in the neighbourhood of the mouth of the river Tyne, one might expect, as is the case, some insects not obtainable elsewhere in East Lothian.

NOTIOPHILUS PALUSTRIS (Duft). Tyne.

„ SUBSTRIATUS (West). Lethem, Gladsmuir.

DYSCHIRIUS SALINUS (Schaum). Common at mouth of Tyne, associated with POGONUS CHALCEUS and DICHIROSTICHUS PUBESCENS.

CYCHRUS ROSTRATUS (L). Not uncommon under dead leaves; Smeaton.

CARABUS GRANULATUS (L). Common. I once took 28 out of a dead Willow. Smeaton. Here both CATENULATUS and VIOLACEUS are of less frequent occurrence than GRANULATUS.

LEISTUS FULVIBARBIS (Dej?). Not common.

„ RUFESCENS (Fab) Common.

DROMIUS LINEARIS (Ol). Banks of Tyne, not common.

„ NIGRIVENTRIS. Not uncommon. Dunbar links.

CALATHUS MELANOCEPHALUS (L). The dark variety NUBIGENA (Hal) occurs more or less frequently.

„ MICROPTERUS (Duft). Occasional.

„ PICEUS (Marsh). Not common.

ANCHOMENUS FULIGINOSUS (Pz). Occasional.

„ SCITULUS (Dj). Very rare, one spec. This is new I believe for Scotland.

OLISTHOPUS ROTUNDATUS (Payk). Occasional on high ground.

BEMBIDIUM OBTUSUM (Sturm). Smeaton.

„ AENEUM (Germ). Common in damp ground.

„ PUSILLUM (Gyll). Tynningham sands, associated with POGONUS DICHIROSTICHUS and DYSCHIRIUS.

BEMBIDIUM SCHUPPELI (Dj). Near mouth of Tyne; one specimen.

FALAGRIA OBSCURA (Gr). Occasional.

ALEOCHARA FUSCIPES AND *LANUGINOSA*. Dunbar.

„ *MÆSTA*, and *OBSCURELLA* (Gr). Dunbar.

„ *NITIDA* (Gr); under bark. Smeaton.

CHILOPORUS LONGITARSIS. Banks of Tyne. October.

CALODERA RUBENS (Er). 4 specimens; beat off May. Lee and Cowley are the two localities given in England by Mr Cox. I fancy this insect has not occurred in Scotland before.

OXYPODA ALTERNANS (Gr). In fungi, Gladsmuir.

HOMALOTA CURRAX (Kr). Binning Wood.

„ *VICINA* (Step). Presmennan Lake.

„ *ANALIS* (Gr). Dunbar, under stones.

„ *CIRCELLARIS* (Gr). Smeaton, under dead wood.

„ *VESTITA* (Gr). Dunbar.

„ *ATERRIMA* (Gr). Smeaton.

TACHINUS HUMERALIS (Gr). Not common in Boleti. Gladsmuir.

„ *COLLARIS* (Gr). Smeaton.

„ *LATICOLLIS* (Gr). Presmennan.

TACHYPORUS SOLUTUS (Er). Not uncommon.

„ *HUMEROSUS* (Er). Tynningham sands.

HYPOCYPTUS LONGICORNIS (Payk). Smeaton, under stones.

CONURUS LITTOREUS (Lin). Banks of Tyne, occasional.

„ *LIVIDUS* (Er). Under bark, Smeaton.

BOLITOBIOUS PYGMÆUS (Fab). In Boleti, Gladsmuir.

„ *TRINOTATUS* (Er). In Boleti, Smeaton.

QUEDIUS UMBRINUS (Er). Tyne banks, rare.

„ *SEMLÆNEUS* (Steph). In park, Smeaton.

„ *RUFIPES* (Gr). Smeaton.

LEISTOTROPHUS MURINUS (L). Occasional, Smeaton.

„ *NEBULOSUS* (Fab). One specimen, Smeaton.

STAPHYLINUS CÆSAREUS (Ceder). Occasional, Smeaton.

OCCYPUS CUPREUS (Rossi). Scarce.

PHILONTHUS ADDENDUS (Sharp). Common.

„ *FULVIPES*. One specimen, banks of Tyne. During a fishing excursion on the Whiteadder last summer, I found this insect exceedingly abundant, almost to the exclusion of other specimens of *Philonthi*, in the bed of the river. About two hours after first finding them, the river came down,

and no doubt washed away or drowned those that remained in their lairs. I found no specimens of the variety *RUBRIPENNIS* (Steph) with the antennæ and legs pitch black. This insect is new for the Forth district, and is marked as rare by Dr Sharp. The unusual abundance in one spot would tend to show that *FULVIPES* is probably a local insect. [Common in Berwickshire; semiaquatic.—J. H.]

„ *SUCCICOLA* (Th). Rare.

„ *UMBRATILIS* (Gr). Tyne and Presmennan, occasional.

„ *ALBIPES* (Gr). Off May; two specimens.

„ *FUCICOLA* (Curt). Common under sea-weed, with

XANTHOLOMA.

„ *SORDIDUS* (Gr). In refuse, Canty Bay; rare.

„ *CEPHALOTES* (Gr). Common in refuse, Canty Bay.

„ *EBENINUS* (Er). Variety *MINOR*, Lethem and Gladsmuir.

„ *SCYBALARIUS* (Nord). In garden refuse.

„ *VENTRALIS* (Gr). Presmennan, rare.

„ *NIGRITULUS* (Gr). In grass roots, Smeaton; rarely.

XANTHOLINUS OCHRACEUS (Gyl). Banks of Tyne, occasional.

BAPTOLINUS ALTERNANS (Payk). Common in decaying wood.

OTHIUS PUNCTIPENNIS (Lac). Rare, Smeaton.

LATHROBIUM BOREALE (Hoch). Rare, one specimen.

„ *LONGULUM* (Gr). Two specimens in ant's nest in dead willow.

STILICUS AFFINIS (Er). Common.

STENUS GUTTULA (Müll). Presmennan. Erichson's variety with fulvous palpi also occurred.

„ *JUNO* (Fab). Common.

„ *PUSILLUS* (Steph). Tyne banks, occasional.

„ *PROVIDUS* (Er). Common, Tyne side.

„ *DECLARATUS* (Er). Under stone, Smeaton; rare.

„ *UNICOLOR* (Er). Under stone, Smeaton.

„ *PALLIPES* (Gr). Not common, under stones, Smeaton.

„ *SIMILIS* (Herbst). Occasional, Tynningham sands.

BLEDIUS SUBTERRANEUS (Er). Presmennan, rare.

HAPLODERUS CÆLATUS (Gr). Smeaton, not common.

LESTEVA SHARPI (Rye). Banks of Whiteadder, very rare, one specimen.

„ *PUBESCENS* (Mann). Banks of Tyne and Presmennan.

- LESTEVA LONGIELITRATA (Goeye). Presmennan. Scarce.
LATHRIMÆUM UNICOLOR (Steph). Rare, Smeaton.
PROTEINUS BRACHYPTERUS (Fab). In Boleti, Gladsmuir.
,, BREVICOLLIS (Er). In carrion, Smeaton, rare.
CHOLEVA CISTELOIDES (Frohl). One specimen off Rubus, Smeaton.
,, LONGULA (Kell). A rare insect; three specimens out of a dead rabbit.
,, SERICEA (Fab). Common in decaying animal matter.
SILPHA LITTOREA (L). Not common, under dead wood, in Binning wood.
,, ATRATA (L). Common under refuse.
NECROPHORUS HUMATOR (Fab). The commonest species of this genus.
,, VESTIGATOR (Hersch). Very rare, one specimen from a collection made at Smeaton thirty years ago.
,, INTERRUPTUS (Steph). Var. GALLICUS (Duv). Male with deeply emarginate clypeus, and posterior trochanters hooked. I took one male specimen of this scarce insect by sweeping in the park at Smeaton; it is new to Scotland so far as I know; and even in England it occurs but seldom.
,, RUSPATOR (Er). Whiteadder, not common.
,, MORTUORUM (F). Common. This genus is well represented for so small an area, only two species being absent, *i.e.*, GERMANICUS, a very rare insect, and VESPILLO, which no doubt occurs in the district. The yellow edge to the elytra serves to distinguish the former; the curved hind tibia the latter insect.
SAPRINUS ÆNEUS (Fab). Occasional, Presmennan.
HISTER CADAVERINUS (E.H). Occasional.
RHIZOPHAGUS FERRUGINEUS (Payk). Banks of Tyne.
,, PERFORATUS (Er). Banks of Tyne, not common.
TRIPHYLUS SUTURALIS (Fab). In fungi growing on ash trees, not uncommon.
SIMPLOCARIA SEMISTRIATA (Ill). Rare.
SINODENDRON CYLINDRICUS (L). I have found the remains of this insect in wood.
APHODIUS CONSTANS (Duft), PUNCTATO-SULCATUS (Sturm). These both occur in the district.
ÆGIALIA ARENARIA (Fab). Not uncommon on Tynningham sands, under stones.

CRYPTOHYPNUS RIPARIUS (Fab). Occasional. Banks of Tyne.

CORYMBITES QUERCUS (Gyll). Banks of Tyne, rare.

AGRIOTES OBSCURUS (Lin). Common by beating.

„ PALLIDULUS (Ill). Rather common on flowers by beating.

PHYLOTRETA NEMORUM (Lin). Common.

„ UNDULATA (K). Occasional.

„ SINUATA. Not common.

PLECTOROSCELIS CONCIENNA (Marsh). Not common.

THYAMIS LURIDA (Scop). Not common.

„ TABIDA (Panz.) Not common.

ANASPIS RUFICOLLIS. Not common.

„ MELANOPE. Common by beating flowers.

AROMIA MOSCHATA (Lin). In the July number, 1875, of the "Scottish Naturalist," I mentioned the fact of my having discovered the larvæ of AROMIA MOSCHATA in Binning Wood, but failed to obtain the perfect insect. I am glad therefore to be able to mention the first capture of the perfect insect in Scotland, near Moniaive, sixteen miles from Dumfries, on September 3rd, by a gentleman, who was fishing, when the insect settled on his neck.

Lepidoptera taken at Threburnford in 1877. By ROBT. RENTON.

SMERINTHUS POPULI. Two. When searching for Caterpillars, September 29th, I came upon one of S. POPULI, and by all appearance it was only a few days old. I kept it till Oct. 3rd, when it died; owing I believe to the cold. Was it not very late for the Caterpillar of this species?

SPHINX CONVULVULI. I saw one, Sept. 16th, at Tweed House Toll, Selkirkshire, at the flower of honeysuckle. I took three in one night at the same place, August 29th, 1875.

CHÆROCAMPA ELPENOR. One specimen.

MACROGLOSSA STELLATARUM. Two specimens.

HEPIALUS SYLVINUS. Several.

„ VELLEDA. Common.

HEPIALUS HUMULI. Common; it was ten days later this season than last, and not so plentiful.

EUTHEMONIA RUSSULA. Two; flies in sunshine.

CHELONIA PLANTAGINIS. More plentiful this season than last, and about two weeks later.

„ CAJA. Two. This moth was more plentiful last season than this.

ARCTIA FULIGINOSA. Three; not so plentiful as usual.

ORGYIA FASCELINA. I bred two from caterpillars, which are plentiful on Yair Hill, Selkirkshire.

BOMBYX RUBI. Four; difficult to take; about three weeks later this season than last. The caterpillars of this moth were most abundant last season, but very scarce this.

„ QUERCUS. Several specimens.

SATURNIA CARPINI. One; I have seen more caterpillars and pupas of this moth, this season, than of any other species.

RUMIA CRATÆGATA. Several; not so plentiful this season as last, and about three weeks later.

METROCAMPA MARGARITATA. Common.

CROCALLIS ELINGUARIA. Two.

GEOMETRA PAPILIONARIA. Two.

CABERA PUSARIA. Common; thirteen days later this season than last.

FIDONIA ATOMARIA. Several; not so plentiful this season as last, and three weeks later.

„ PINARIA. Common about Scotch fir woods.

ABRAXAS GROSSULARIATA. Not so plentiful this season as last; ten days later.

LARENTIA DIDYMATA. Common.

„ CÆSIATA. Common; about fourteen days later than last season.

„ PECTINITARIA. Commoner this season than last, and about ten days later.

EMMELESIA AFFINITATA. Three.

„ ALCHEMILLATA. Five.

„ ALBULATA. Six.

THERA JUNIPERATA. One. Nov. 19.

YPSIPETES RUBERATA. One.

„ IMPLUVIATA. Four.

„ ELUTATA. Common; about twenty days later this season than last.

MELANTHIA OCELLATA. Last season I only saw one specimen of this little beauty; but this season it was very plentiful.

„ TRISTATA. Common about the same time as last season.

CIDARIA RETICULATA. Three.

„ TESTATA. Common.

„ POPULATA. Two.

„ FULVATA. Common; seven days later this season than last.

„ PYRALIATA. Common.

EUBOLIA MENSURARIA. Common; sixteen days later this season than last.

„ PALUMBARIA. Three.

ANAITIS PLAGIATA. Two.

CHESIAS SPARTIATA. Two.

TANAGRA CHÆROPHYLLATA. Several; about ten days later this season than last; flies in sunshine and at the darkening.

CLOSTERA RECLUSA. Three.

NOTODONTA CAMELINA. Two.

DILOBA CÆRULEOCEPHALA. Four.

ACRONYCTA TRIDENS. Several.

„ RUMICIS. Two.

„ MENYANTHIDIS. I bred several; the caterpillars of this moth were very plentiful last season, but scarce this season, and about six weeks later; some, I fear, the cold would kill before they were fully fed up.

LEUCANIA CONIGERA. Common; two weeks later this season than last.

GORTYNA FLAVAGO. Three.

HYDRÆCIA NICTITANS. Common.

XYLOPHASIA RUREA. Very common at sugar; about ten days later this season than last.

„ POLYODON. Very common at sugar; about eighteen days later this season than last.

CHARÆAS GRAMINIS. Several; about fourteen days later this season than last.

APAMEA BASILINEA. Very common; about eighteen days later this season than last.

„ CONNEXA. Several.

MIANA STRIGILIS. Several.

MIANA FASCIUNCULA. Two.

CELÆNA HAWORTHII. Not common; flying over heath in day time.

CARADRINA BLANDA. One; Cleckhimin.

RUSINA TENEBROSA. Common at sugar; about three weeks later this season than last.

TRYPHÆNA JANTHINA. Several at sugar.

„ ORBONA. Common at sugar.

XANTHIA AURAGO. One.

DIANTHÆCIA CUCUBALI. One; Cleckhimin.

POLIA CHI. Very plentiful last season, in this quarter. You could scarcely pass a stone wall or a tree about the latter end of August, but CHI might be observed sitting thereon. The only two I saw this season, both apparently newly out of the chrysalis, was on October 20th, nearly two months later than last.

EPUNDA LUTULENTA. One; Cleckhimin.

ANARTA MYRTILLI. Common on heath; flies in sunshine.

HELIODES ARBUTI. Two.

ABROSTOLA URTICÆ. Two.

PLUSIA BRACTEA. One; Cleckhimin.

List of Lepidoptera taken near Ayton, during 1877. By
SIMPSON BUGLASS.

COLIAS EDUSÆ. I have got three specimens; the first captured by Master James W. Bowhill, Ayton.

ACHERONTIA ATROPOS. Two specimens; one on 4th June at Ayton, and the other at Burnmouth, in August.

CHÆROCAMPA PORCELLUS. Four good specimens.

SESIA BOMBECIFORMIS. Three specimens. These were reported as SESIA APIFORMIS in last year's list.

EUCHELIA JACOBÆA. One specimen taken in Ayton Woods.

CHIMATOBIA BOREATA. Ayton Woods.

LARENTIA CÆSIATA. One taken on Coldingham Moor.

EMMELESIA ALBULATA. Sea banks.

EUPITHECIA CASTIGATA. Lamberton Moor.

EUPITHECIA NANATA. Ayton.

„ ABBREVIATA. Do.

„ EXIGUATA. Do.

„ RECTANGULATA. Do.

ANTICLEA BADIATA. Ayton Woods.

CIDARIA TESTATA. Taken at Ayton Woods and Coldingham Moor.

CILIX SPINULA. One specimen taken near Ayton.

DICRANURA FURCULA. Two caterpillars caught on dwarf willows, in Ayton Woods.

AGROTIS SAUCIA. Seems pretty common. I bred a good series from caterpillars taken on cabbage and lettuce in Ayton Castle gardens.

TRYPHÆNA SUBSEQUA. One specimen of this very rare moth taken on sea banks.

DIANTHÆCIA CONSPERSA. Two. The first I have taken here.

HELIOTHIS MARGINATUS. Sea banks.

„ ARMIGER. Sea banks.

PLUSIA PULCHRINA or V. AUREUM. This may be said to be plentiful. It has always been confounded with IOTA.

The following also were captured near Ayton:—

AGLOSSA PINGUINALIS. PERONEA SCHALLERIANA.

SCOPULA OLIVALIS. „ VARIEGANA.

„ FERRUGALIS. TERAS CAUDIANA.

STENOPTERYX HYBRIDALIS. „ CONTAMINANA.

SCOPARIA MERCURELLA. DICTYOPTERYX BERGMANNIANA.

„ CRATÆGELLA. PENTHINA PRÆLONGANA.

CRAMBUS PRATELLUS. SCIAPHILA ALTERNANA.

„ TRISTELLUS. „ COLQUHOUNANA.

„ INQUINATELLUS. CATOPHTRIA ULICETANA.

„ HORTUELLUS. „ SCOPOLIANA.

EPHESTIA ELUTELLA. XANTHOSSETIA HAMANA.

MELIA SOCIELLA. TORTRICODES HYEMANA.

TORTRIX PYRASTRANA. DIURNEA FAGELLA.

„ SORBIANA. TALEPORIA PSEUDOBOMBICELLA.

„ RIBEANA. ALUCITA POLYDACTYLA.

„ VIRIDANA.

List of Lepidoptera taken near Eyemouth, in 1877. By
WILLIAM SHAW.

COLIAS EDUSA. Seems to have been distributed over Scotland; in June I got two, and Mr Cumming, Ayton Castle, seven. Mr Kelly, Cleckhemin, took half a dozen on Gullane Links, in September, which must have been the second brood.

NOLA CONFUSALIS. One specimen, Highlaws road.

SETINA IRRORELLA. Has not been uncommon this season; sea banks.

LIPARIS SALICIS. One male near a balsam-poplar; Eyemouth Mill.

EPHYRA PUNCTARIA. One worn specimen; Ayton Woods.

MACARIA LITURATA. One specimen; seems rare here; Ayton Woods.

EMMELESIA ALBULATA. Four specimens; sea banks.

EUPITHECIA SATYRATA. Three fine specimens; sea banks.

„ LARICIATA. One specimen; Ayton Woods.

„ ASSIMILATA. One specimen; shaken from currant bushes.

„ RECTANGULATA. On apple trees, common; Highlaws.

W. Sandison.

ANTICLEA DERIVATA. Two specimens near Dog Rose; Highlaws.

MAMESTRA ANCEPS. Not uncommon, on sea banks.

AGROSTIS PYROPHILA. One specimen; sea banks.

DIANTHÆCIA CUCUBALI. One fine specimen, the first I have seen here; banks of the Eye.

DASYPOLIA TEMPLI. One male at light, Eyemouth;—*P. Brack.*

HELIOTHIS ARMIGERA. One fine specimen; sea banks.

CRAMBUS FALSELLUS. One on sea banks.

SCOPARIA CRATÆGELLA. Larvæ among *H. rutabulum*.

„ TRUNCICOLELLA. One; larvæ among moss.

„ CEMBRÆ. One; sea banks.

PERONEA SPONSANA. One specimen.

CNEPASHIA MUSCULANA. One specimen.

EPHIPPIPHORA BRUNNICHIANA. Sea banks; several.

SCIAPHILA VIRGAUREANA. Seabanks; one.

„ COLQUHOUNANA. Two; Highlaws.

DICTOPTERYX BERGMANNIANA. Several; Highlaws.

ARGYROTOXA CONWAYANA. One specimen.

- GRAPHOLITA RAMANA. One specimen.
 CATOPTRIA ULICETANA. Several.
 „ CANA. On sea banks.
 ARGYROLEPIA BAUMANNIANA. One on sea banks.
 EUPŒCILIA ANGUSTANA. One specimen.
 TINIA PELLIONELLA. One specimen.
 „ PALLESCENTEELLA. One specimen.
 DEPRESSARIA ALSTRŒMERELLA. Not uncommon.
 „ ARENELLA. Not common.
 DASYCERA SULPHURELLA. Larvæ under Alder bark.
 GELECHIA SEQUACELLA. Several specimens.
 GRACILLARIA ALCHEMILLELLA. Two specimens.
 ELACHISTA RUFOCINERELLA. Common, road sides.
 „ CYGNIPENELLA. One specimen.
 PTEROPHORUS BERTRAMI. One on sea banks.
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The Family of Riddell. By THOMAS ARKLE, Highlaws,
 Morpeth.*

RIDDELL and Lilliesleaf have been in possession of the family of Riddell from the earlier part of the twelfth century till the year 1826. Sir Walter Scott, in his Notes to the Lay of the Last Minstrel, seems to imply that the family had been settled here at a much earlier period; and gives an account of the discovery in the foundations of the ancient chapel of two stone coffins, one having a legible date A.D. 727, and the other 936. There is, however, nothing stated to connect the remains found in the coffins with the family of Riddell; and as the family was of considerable standing in Normandy previous to 1066, it is inferred that Monsieur Ridel, one of the companions of William the Conqueror, and whose name is inscribed on the Roll of Battel Abbey, was the founder of the Riddell family in this country.

It may be incidentally noticed, that Geoffridus Ridel, who figured in Italy as Duke of Gaeta in 1072; and Regnaldus Ridel who, in 1093, appears as Count de Ponte Carvo, were probably

* Read to the Members of the Berwickshire Naturalists' Club, on the occasion of their visiting Riddell and Lilliesleaf, 26th September, 1877.

brothers of Monsieur Ridel, as a party of Normans had a little previous to the earlier date invaded Italy, and eventually Sicily.

William bestowed on his Ridel follower large landed property in England, where the family became celebrated, and some of them held high official appointments. One of the Riddells married a daughter of the Earl of Chester, from whom was descended Maud, wife of David, Earl of Huntingdon, a maternal ancestor of the Bruce.

Some of the members of the family emigrated to Scotland, with the Prince of Cumberland, afterwards David the first. Gervasius Ridel, was a great favourite of the Prince, who in 1116 appointed him Sheriff of Roxburghshire, the earliest on record. He must have been a constant attendant on royalty, for he is a frequent witness to crown charters, and especially to that celebrated commission appointed in the year 1116 for enquiring into the revenue of the Church at Glasgow.

Walter Ridel accompanied Gervasius in the suite of Prince David, but there is some doubt whether he was the son of Gervasius, or only a brother or near relative. He also enjoyed the friendship and patronage of royalty, and was a witness to crown and other charters of importance. The grant to Sir Walter from David the first of the lands of Western Lilliesleaf, Whitton, &c., which are now called the Barony of Riddell (dated somewhere between 1125 and 1153), is remarkable as being the oldest charter extant from a king to a layman. This ancient document became so frail that it was "legally" copied at Jedburgh in 1506; and the lands granted by it continued in the family for upwards of six hundred years without an entail; a fact highly honourable to the members through whom they were handed down.

Besides this ancient charter there is a bull from Pope Adrian the IV., nearly as old, confirming the properties vested in Walter to his brother and heir Anchitell, Walter having no family. This bull must have been granted between 1154 and 1159, but the year is not given.

There is another bull from Alexander the III., who succeeded Adrian, dated 17th of June, 1160, confirming the will of the said Walter de Ridal bequeathing to his brother Anchitell the lands of Lilliesclive, Whettunes, &c., and ratifying a bargain concerning the church of Lilliesclive.

There is also another bull of the same Pope, confirming the

will of Sir Anchitell de Ridale, in favour of his son Walter, conveying the lands of Lilliesclive and others, dated 10th March, 1180. All the original documents are now in the possession of Sir Walter Riddell, of Hepple, in the county of Northumberland, the representative of the family, who has had copies of them carefully written out. They afford striking evidence of the widely distributed power of the Church of Rome, and of her multitudinous and minute interferences in the concerns of her adherents; when, as in this instance, in a remote part of Scotland, it was thought necessary to invoke the aid of His Holiness, for the purpose of strengthening the claims of a son to the inheritance of his ancestors.

Several of the succeeding lairds of Lilliesleaf received the honour of knighthood; and on the 14th of May, 1628, John Riddell, then owner of the estate, had a baronetcy conferred upon him. This was about three years after the institution of the order in Scotland.

We must pass over his successors for nearly two hundred years, until we come to the late Sir John Buchanan Riddell, the ninth baronet, who was Member of Parliament for the Selkirk Burghs. He was a great agriculturist, and as such, was much in advance of the times in which he lived. Having greatly enlarged his estate, he took most of it into his own hand, and according to the observations of Scott, as reported by Lockhart, superintended perhaps a hundred ploughs. He died in April, 1819, aged fifty-one years, leaving his affairs in a very involved condition, in consequence of the numerous projects and immense improvements in which he was engaged.

His brother-in-law, the Earl of Romney, being left trustee, visited Riddell, when his lordship finding matters extremely complicated, unfortunately came to the resolution of parting with the estate. Though the price of corn was comparatively high, late harvests had rendered the crops, particularly in the northern part of the island, of little worth; and the decline in value of other sorts of landed produce had brought the agricultural community into the most depressed condition; whilst at the same time the resumption of a gold currency, instead of £1 notes, had most seriously affected the banking and commercial interests throughout Great Britain. Under these adverse circumstances, the estate was sold in 1826, after great reductions in the upset

price. It was afterwards frequently asserted that the timber on the property was worth all the purchase money.

The alienation of the estate was a grief to the whole neighbourhood, where the last possessor and his amiable lady had been held in the highest esteem; and Sir Walter Scott, who was perhaps rather inclined to over-estimate the antiquity of the family, pathetically lamented the untoward circumstances, when he and his son-in-law (who records the incident) paid a visit to the venerated place.

The late Sir John, amongst other large transactions, purchased from the Duke of Portland the barony and lands of Hepple, in Coquetdale, Northumberland, containing about ten thousand acres of arable and moor land. He sold large portions of this estate during his life-time, but the remainder, comprising four thousand acres, descended to his eldest son, Sir Walter Buchanan Riddell, the present possessor of the estate; who has not only enlarged and improved the property, but been a benefactor to the neighbourhood by the erection of a handsome school, which is used as a chapel in connection with the Church of England; and by the prominent part he has taken in promoting the building of bridges, and transforming the rugged tracks of former days into roads adapted to the requirements of modern times.

Sir Walter has built a residence in a beautiful situation, and planted largely on the surrounding hills. But though Hepple may be as picturesque, it cannot compete with Riddell in the character of a baronial residence, nor in the grand extent of wood, and general richness of the estate as inherited and improved by Sir John. Never, certainly, can it recall to the members of the family such memories and associations as "ancient Riddell's fair domain."

The Swintons of that Ilk. By ARCHIBALD CAMPBELL SWINTON, of Kimmerghame, LL.D., F.R.S.E., etc.

The Swintons of Swinton derive their name from the parish in Berwickshire; the whole or greater part of which at one time belonged to them. It is now shared by five other principal proprietors.* Popular tradition, to which the armorial cognisance of the family† affords some countenance, attributes their first acquisition of the lands to the prowess of an ancestor in delivering the district from the ravages of wild boars. Another legend represents Edulf de Swinton as rendering valuable service to Malcolm Canmore in his struggle for the recovery of the Scottish throne, and receiving from that monarch a territorial grant as the reward of his valour and loyalty. The year 1060 is stated by Douglas, in his "Baronage of Scotland," as about the time when this, the supposed founder of the Swinton family, lived. And a charter of King David I., still extant in the archives of the Dean and Chapter of Durham, and which is represented in facsimile in the National Manuscripts of Scotland,‡ shows that the lands of Swinton were possessed, probably by I. Edulf, and certainly by II. Liulf, his son, and III. Udard his grandson. The last of these is styled in another charter by the same monarch,§ "the sheriff" (*Viccomes*). It has been noticed as a coincidence—probably no more than a coincidence—that the names Liulf and Udard correspond with Ligulf and Odard, who, about this time, were successively Sheriffs of Northumberland.

IV. HERNULF or ARNULF, in whose favour the charters above referred to were granted, must have been a man of rank and distinction, as he is designated by the king, "*Miles Meus*," my Knight. Though he is not designed son of Udard, "yet,"

* Mr Clay Ker Seymer of Handford, trustees of Lady Talbot de Malahide, trustees of the late Lord Marjoribanks, Lieut. Col. Trotter of Mortonhall, and Lady Marjoribanks of Ladykirk. There has long existed in the village a family of Swines, the head of which, three generations ago, asked and obtained permission from the lord of the manor, to change the name to Swinton, "on account of the nastiness of the beast." The permission was never acted on.

† *Sable*, a chevron *or*, between three boars heads erased *argent*. Crest, a boar chained to a tree, and above on an escrol *J'espere*. Supporters (said to have been first granted to Sir John Swinton in 1722) two boars standing on a compartment whereon are the words *Je pense*.

‡ Vol. i., No. xxi.

§ Ib., No. xxii.

observes the author of the Baronage, "as fees were then begun to be hereditary in Scotland, it is highly probable that he was either his son or heir male; for certain it is that he was possessed of the same lands which were heritably enjoyed by the three preceding generations, his predecessors." Hernulf is said to have died in the reign of Malcolm IV., and to have been succeeded by his son,

V. SIR ALAN DE SWINTON also designated "Miles," who seems to have been a distinguished warrior. Between 1189 and 1199 he obtained a charter of the barony of Swinton from Bertram Prior of Coldingham, the superior thereof. His name and attributes—

"The giant stature and the ponderous mace

Which he alone of Scotland's realm could wield."

are borrowed by Sir Walter Scott for the hero of his dramatic sketch of "Halidon Hill;" though the battle of Homildon, on which the drama is founded, was not fought till two centuries later, and the Swinton who fell there was Sir John. A monument to Sir Alan still exists in Swinton Church. Under rudely sculptured figures of a boar and three smaller animals of the same kind is the inscription—

HIC . JACET . ALANUS . SWIVTONUS . MILES . DE . EODEM

and below is a full length figure of the knight with his arms bent upwards from the elbows, and clasping what might have been supposed to be a book, had books existed in those days. An arched vault in front of the monument, and under the floor of the church, having been opened some years ago, was found to contain a coffin and three skulls. Of one of these skulls, which was of unusual dimensions, and supposed therefore to be that of Sir Alan, a cast was taken and presented to Sir Walter Scott, who placed it in the armoury at Abbotsford beside a similar cast of the skull of King Robert the Bruce. There is a story of a ghastly glare shed by the setting sun through the mullioned window on the Swinton skull, being accepted by Sir Walter, as a presage of tidings received the following day, of a calamity which had befallen one of Sir Alan's descendants.

Of the barons of Swinton for the next hundred and eighty years nothing need be said here, except that their existence is proved principally by various charters in which their names appear as witnesses. They were VI. SIR ADAM DE SWINTON

VII. and VIII. a second and third SIR ALAN, IX. and X. two HENRIES.* More authentic and detailed particulars of the lives and actions of succeeding members of the house are afforded by the histories of the times, and by a connected progress of original writs in the possession of the family.

XI. SIR JOHN SWINTON, supposed to be the son of the second Henry, obtained from him a charter of the lands of Little Swinton, the precept of sasine following on which is dated at Scone in the year 1379. There is also a charter in his favour by the Abbot of Dunfermline, with consent of the monks of the Priory of Coldingham, of the whole lands of the Lordship of Meikle Swinton, of which confirmation was granted on the 30th October 1382, by John Earl of Carrick, Stewart of Scotland, eldest son of King Robert II. There are further confirmations of the Dunfermline Abbot's charter, by the Bishop of St. Andrews, by King Robert II., and by Pope Clement VII, the latter with leaden seal attached; and two ratifications by John Steyl, Prior of Coldingham, on the 5th March, 1393, and 22nd November, 1394. Sir John Swinton took a prominent part both in civil and military affairs during the reigns of Robert II. and Robert III. With both of these kings he seems to have been in great favour, and received from each of them a pension, amounting in the one case to £20 sterling, and in the other to 200 merks. He was twice employed as ambassador extraordinary to negotiate a treaty of peace with the English court, for which purpose he obtained safe conducts from Richard II. in 1392, and from Henry IV. in 1400. But it was as a military leader that he was most conspicuous. He has sometimes been identified with *Sir John Assueton* (a name unknown in Scotland); of whom it is told, that being one of the Scottish knights serving in the English army against France, in or about the year 1369, he won the respect and admiration of the enemy, by the gallantry with which he entered alone and on foot within the barriers of Noyon, a city of Picardy, and fought single handed "near the space of an hour, during which time he wounded several."† It is certain that Swinton was engaged at the battle of Otterburn on the 31st July, 1388; and it is said to have been greatly owing to his intrepidity that the Scottish army obtained the victory, though

* Douglas's Baronage, pp. 127, 128.

† Abercromby's Achievements of the Scots nation, vol. ii., p. 169.

with the loss of their gallant leader, the Earl of Douglas and Mar.* The circumstances attending Sir John's death, fourteen years later, on the fatal field of Homildon, are narrated both in the older chronicles, and in the modern histories of Scotland. "The English," we are told,† "advanced to the assault, and Henry Percy" (the well known Hotspur) "was about to lead them up the hill, when March caught his bridle, and advised him to advance no further, but to pour the dreadful shower of English arrows into the enemy. This advice was followed with the usual fortune; for in all ages the bow was the English weapon of victory, and though the Scots, and perhaps the French, were superior in the use of the spear, yet this weapon was useless after the distant bow had decided the combat. * * * * The Scots fell without fight, and unrevenged, till a spirited knight, Swinton,‡ exclaimed aloud, 'O my brave countrymen! what fascination has seized you to-day that you stand like deer to be shot, instead of indulging your ancient courage, and meeting your enemies hand to hand? Let those who will, descend with me, that we may gain victory, or fall like men.' This being heard by Adam Gordon, between whom and Swinton there existed an ancient deadly feud, attended with the mutual slaughter of many followers, he instantly fell on his knees before Swinton, begged his pardon, and desired to be dubbed a knight by him whom he must regard as the wisest and the boldest of that order in Britain. The ceremony performed, Swinton and Gordon descended the hill, accompanied only by a hundred men, and a desperate valour led the whole body to death. Had a similar spirit been shown by the Scottish army, it is probable that the event of the day would have been different." This incident is the foundation of Sir Walter Scott's drama already referred to. But the scene of action is transferred from Homildon

* One of the ballads on the battle, in Percy's Reliques (vol. i., p. 26), has this verse:—

"Swynton fayre fylde upon your pryde
To battel make yow bowen;
Syr Davy Scotte, Syr Walter Stewarde,
Syr Jhon of Agurstone."

† Pinkerton's History of Scotland, vol. i., p. 73. See also Tytler, vol. iii., p. 131.

‡ Dr. Burton (History of Scotland, vol. iii., p. 83) calls him "a young knight." Swinton must have been between forty and fifty years of age.

to Halidon Hill. "For this" observes Sir Walter, "there was an obvious reason, for who would again venture to introduce upon the scene the celebrated Hotspur, who commanded the English at the former battle?" "There are, however," he adds, "several coincidences which may reconcile even the severer antiquary to the substitution of Halidon Hill for Homildon. A Scottish army was defeated by the English on both occasions, and under nearly the same circumstances of address on the part of the victors, and mismanagement on that of the vanquished; for the English long-bow decided the day in both cases. In both cases also a Gordon was left on the field of battle; and at Halidon as at Homildon, the Scots were commanded by an ill-fated representative of the great house of Douglas." The Douglas who fought at Homildon, and not only lost an eye in the battle, but was taken prisoner, was Archibald, the fourth Earl, surnamed *Tine-man*, i.e. *Lose-man*, from his repeated defeats and miscarriages. From him, Sir John Swinton had obtained in 1401, a charter of the lands of Cranshaws. In the title to the lands he is styled by the Earl, "our beloved kinsman" (*dilectus consanguineus noster*). This designation he seems to owe to the fact that he had married the widow of Douglas's grandfather, who was the famous William, first Earl of Douglas. The lady was Margaret of Mar, sister of Thomas, the last male heir of Mar. She was the mother of James, second Earl of Douglas and Mar, the hero of Otterburn, and of Isabel Douglas, who figured conspicuously in the recent case regarding the succession to the Mar Peerage. In virtue of his marriage, Sir John Swinton was, according to the custom of the times, styled Lord of Mar. Along with his wife he is found confirming a grant of Drumlanrig, which had been given by his step-son, Earl James, to a natural son, from whom descended the Dukes of Queensberry. By this lady Swinton had no issue. His second wife was the Lady Margaret Stewart, daughter of King Robert the Second, by whom he had a son,

XII., also SIR JOHN, in whose favour there is a precept of sasine of the lands of Cranshaws by Archibald Earl of Douglas, dated 10th August, 1412. Like his father he was a distinguished soldier, though it was on foreign fields that his valour was principally displayed. Shortly before the death of the Regent, Robert Duke of Albany, in 1419, a select body of six or seven thousand Scots was sent to the assistance of the King of France,

then in great danger of being completely conquered by Henry V., of England. The leaders of this force were John Stewart Earl of Buchan the Regent's second son, and Archibald Douglas Earl of Wigton; and "the chief gentlemen of note and quality that went along with them* were Sir Robert Stewart, (another son of the Regent) Sir Alexander Lindsay, (brother of the Earl of Crawford) and Sir John Swinton. The first-fruit of this expedition was the battle of Beaugé, where on the 22nd of March, 1421, an important victory was gained over the English army, commanded by the Duke of Clarence, brother of Henry V. "None among the English," we are told,† "fought with a greater courage and resolution than the Duke himself; but Sir John Swinton espying him (being easily known by his coronet shining with precious stones and his glistening armour), ran fiercely at him with a lance, and wounded him in the face; he being thereby in a great fury, put forward his horse to have charged the enemy; but was encountered by the Earl of Buchan, who ran him through with a spear, and so slew him, or (as others) felled him down to the ground with a steel hammer." This exploit is referred to in the "*Lay of the Last Minstrel*;" where a Swinton is among the leaders of the Border clans who come to the relief of Branksome. The lines were introduced into the second edition of the poem.‡.

"Vails not to tell what steeds did spurn,
Where the Seven Spears of Wedderburn
Their men in battle-order set;
And Swinton laid the lance in rest,
That tamed of yore the sparkling crest
Of Clarence's Plantaganet."

The victory at Beaugé was deemed of such importance, that the Scottish leader Buchan was rewarded with the baton of Constable of France. A similar honour awaited the veteran Earl of Douglas, who shortly afterwards arrived in France as commander

* Hume's History of the House of Douglas, p. 125. † *Ib.*, p. 126.

‡ In a letter to George Home of Paxton and Wedderburn, Sir Walter says, "will you pardon the vanity of an author in hoping a copy of a new edition of his work may not be unacceptable to you as a man of letters, and an ancient borderer. It contains some lines on p. 138 relative to the Homes of Wedderburn, and the Swintons (my own maternal ancestors) which, with a few others, were added since the quarto edition."—Catalogue of the Scott Centenary Exhibition in 1871, p. 164.

of the Scots auxiliaries, and in recognition of his well-known valour was at once created Duke of Touraine. But his proverbial ill-fortune attended the gallant *Tineman*. At the battle of Verneuil, on the 17th of August 1424, the combined forces of France and Scotland under his command, were totally defeated by an English army under the Duke of Bedford, acting as Regent for Henry VI. Among the slain were the Earl himself, Buchan, Stewart, Lindsay, and Sir John Swinton, "with above two thousand others of all sorts."* Apparently before going on foreign service Swinton had, by a deed dated at Dunbar, granted to the Prioress and Convent of Coldstream, a lease of his lands of Little Swinton for ten years from Whitsunday, 1424. The amount of rent is not stated, merely "the reward maid and to be maid to me both temporal and spiritual," the latter no doubt being prayers for his safety. Sir John Swinton had been twice married; first, to Lady Marjory Dunbar, daughter of George Earl of March, who died shortly afterwards without issue; and secondly to his cousin-german, Lady Marjory Stewart, daughter of the Regent Albany, who was a son of King Robert II.

XIII. SIR JOHN SWINTON of Swinton, the son of this marriage, being an infant at the time of his father's death, was left under the guardianship of William de Wedderburn. By Wedderburn, a notarial instrument was taken in the Monastery of Coldstream, on the 15th of January, 1426, to the effect that Lady Margaret Swinton, his ward's grandmother, consented to the payment of a debt due by her late husband out of her terce of the lands of Cranshaws. Among the witnesses to this instrument, are Lady Marion of Blackburn, Prioress of the Monastery, and Lady Jean of Stichale, Nun. On occasion of the forfeiture of the Earl of March, a question arose whether the lands of Cranshaws were his in property or in tenandry. The dispute lasted for upwards of twenty years, and was ultimately decided by an inquest appointed by Parliament in 1484, to the effect that March held in tenandry only; and that the lands belonged to Swinton in virtue of the original grant to his grandfather.† This Sir John Swinton had, besides a son John who succeeded him, a daughter,

* Hume's History of the House of Wedderburn, p. 129.

† The representation on the subject made by Sir John Swinton to the King bears that the said lands of Cranshaws past memory of man was a tenandry of the Earldom of March, and belonged in property and heritage to the Lady

Margaret, who married Thomas, son of John Falside of that Ilk, the representative of an ancient family in the Lothians. They had a son, George, of whom it is told, that after the battle of Pinkey in 1547, his castle of Falside was burned by the English after a stout resistance. Sir John Swinton died in 1500. His son,

XIV. JOHN SWINTON of Swinton married, in 1475, Katharine Lauder, a daughter of the family of the Bass. As the parties were in the fourth degree of consanguinity, a dispensation was granted by the Bishop of Glasgow. Of this marriage there were four sons. The third and fourth seem to have died without issue. The second, Nicholas, a burghess of Haddington, possessed from 1518 to 1531, the lands of Harcarse, which his father had redeemed from a creditor "by paying down 120 merks upon the altar of St. Giles." A son of Nicholas was David Swinton, parson of Cranshaws, who again had two sons, John and George. It is considered not improbable that this John may have been the subject of a copy of verses entitled, "*Tears on the death of Evander, occasioned by the Lamentable Losse of the truelie Noble and Generous Sir John Svynton, knight, Collonel of an Regiment of 2000 Nedderlanders, going to Venize, who was cast away by a storme on the coast of England, upon Goodwin Sands, the 13 of Octob., 1630.*" This elegy, the author of which was George Lauder, son of Lauder of Halton, and grandson of Sir Richard Maitland of Lethington, was reprinted in 1848,* from a copy presumed to be unique. The hero was presumably one of the many Scottish Colonels who, between 1600 and 1640, "faithfully served the Venetian State against both the Christian and Turkish Emperors."† But his services seem to have been given to many of the armies of the Continent, as he is thus apostrophised—

Moray, who gave them to Archibald Douglas, her son, from whom Sir John Swinton, the petitioner's grandfather purchased them for his service "and als monie silver veschals as war vorth fyff hundreth markis of Scottis mone, swa that of the Erle of Marche I clame na rycht bot to be a tenande to my Lord that now is, for my Grantschyr bocht thae landies der eneuch, considering quhat he gaff for thaim, and in contrair of the Erle of Marche in defense of your realme he was slane at Homyldon."

* The editor of the reprint was the late W. B. D. D. Turnbull, Advocate, who presented it to his colleagues of the Bannatyne Club.

† Works of Sir Thomas Urquhart of Cromarty (Maitland Club), p. 245.

“The actions of thy first and tender yeares
 Astonished *Holland* yett for strange admeirs
 When *Julliers* saw thy forduard youth advance
 Where leaders failld and feard the hurt of chance
Bohemia's battles saw thee bathed in blood
 Outfare all feare where death and horror stood.”

and after references to “The *Russian* warres and fierce *Polonian* fightes,” and “Beseege*d* *Stade* where *Cesar's* Eagles spred There conquering wings;” the conclusion is drawn—

“These were bot pressages of greater deeds
 Though none more glorious in Times Annals reads.”

While it is assumed that the “truelie noble and generous” individual thus bewailed may have been the great grandson of the 14th Baron of Swinton, it has been noticed that the Register of the Great Seal contains a charter of date 17th June, 1605, in favour of Mark Swinton, Provost of Inverkeithing, and John Swinton, his son and heir. These worthies have no place in the existing writs of the family. But the “Evander” of Lauder’s muse may as probably have been the son of the Provost as of the Parson. Katharine Lauder, the wife of John Swinton of Swinton, died in 1515, “bequeathing her soul to Almighty God and the Blessed Virgin and all the saints of Paradise, and her body to be buried before the Altar of St. Ninian, in the Parish Church of Cranshaws.” Within four years afterwards Swinton married as his second wife, Elizabeth Cunninghame, of whose family or history nothing is known.

XV. JOHN SWINTON, his eldest son received from his father in 1514, the fee of the lands of Little Swinton. In 1518, he obtained a dispensation from Pope Leo X., for his marriage to a relation within the third or fourth degree of consanguinity. The lady was Marion, daughter of David Home of Wedderburn, who with his eldest son, one of the celebrated “Seven Spears,” fell at Flodden. The dispensation was produced by the parties in the church of Polwarth, on the 26th October, 1520, with a view to the proclamation of the intended marriage. But the marriage was not actually celebrated till at least two years afterwards, as on the 21st October, 1522, Swinton grants to “the prudent damsel whom he proposed, God willing, to take to wife,” a life-rent charter of the lands of Elbawk.* Of this marriage, contracted

* In some of the family writs this is the name given to the Mansion House of Swinton.

with so much deliberation, there were two sons, John the heir, and George, of whom nothing is known, and eight daughters. Of the daughters, two only seem to have been married; the one, Janet, to Mr John Nicolson, an eminent lawyer, from whom are descended the Nicolsons of Lasswade and Carnock; the other, Elizabeth, to Matthew Sinclair of Longformacus. Their grandson, John Sinclair, was the first Baronet of Stevenson, having obtained that dignity from Charles I., in 1636.

XVI. The eldest son of John Swinton and Marion Home was, like so many of his predecessors, SIR JOHN. He was among the barons, who in 1567, signed the bond for the protection of the young king, James VI., against the Earl of Bothwell, on the marriage of the latter to Queen Mary. He married in 1552, as usual by Papal dispensation, his cousin, Katharine Lauder, daughter of Robert Lauder of Bass, and died in December, 1579. The two younger sons of this marriage, Alexander and George, are mentioned as having respectively obtained from their mother, liferents of the lands of Greenrig and Bittrickside.

XVII. The eldest son, ROBERT, styled by Douglas "a man of good parts and great activity," was served heir to his father in 1585. He was twice married. His first wife was Katharine Hay, daughter of William Lord Hay of Yester, who had acted as one of his Curators along with George Lauder of Bass, John Swinton of Inverkeithing, George Swinton of Clovay, and the well-known Thomas Craig, Advocate, author of the "*Jus Feudale*." By Katharine Hay, Robert Swinton had a son John, and a daughter Katharine. Katharine married Sir Alexander Nisbet of that Ilk, a devoted Royalist, whose estates were forfeited for his adherence to Charles I. They had five sons. The eldest son, Sir Philip, following his father's example, was celebrated for his successful defence of Newark, of which place he was lieutenant governor, and was ultimately taken prisoner at the battle of Philiphaugh, and executed at Glasgow on the 20th of October, 1646. Alexander, the second son, and Robert, the third, both fell in the field under the Marquis of Montrose. The fourth and fifth, John and Adam, were also gallant soldiers on the same side. The last was the father of Alexander Nisbet, the well known author of "*The Heraldry of Scotland*," in whom the ancient family of Nisbet of that Ilk, became extinct. Robert Swinton married secondly, in 1597,

Joan Hepburn, sister of Patrick Hepburn, of Whitecastle; by whom he had two sons, Alexander and Robert, and a daughter Helen, married to John Hepburn of Smeaton. He was appointed Sheriff of Berwickshire in 1620, and dying six years afterwards, was succeeded by his eldest son,

XVIII. JOHN, who survived his father only five years. On his death the estates passed to the eldest son of Robert, by his second marriage,

XIX. SIR ALEXANDER SWINTON, who had acquired the lands of Hilton, but disposed of them on his succession to the family estates. He was appointed Sheriff of Berwickshire in 1640. The same year an Act of Parliament was passed confirming to him the baronies of Swinton and Cranshaws, with the tiends thereof and the patronage of the church of Cranshaws.* Twenty years before he had married Margaret, daughter of James Home of Framepath and St. Bothans, a cadet of the family of Home. Of this marriage there were six sons and five daughters. The daughters were married respectively to Sir James Cockburn of Ryslaw, Mark Ker of Moriston, Brown of Thornydykes, Hepburn of Beanston, and Dr George Hepburn of Monkrig. Of John, the eldest son, we shall have something to say hereafter.

The second son, Alexander, was in early life a soldier, and was taken prisoner at the battle of Worcester, fighting on the side of the king.† But he afterwards returned to civil pursuits, and was admitted a member of the Faculty of Advocates on the 27th of July 1671. Being a zealous Presbyterian, he relinquished his profession in 1681 rather than take the test, but received from the King in 1686, a special letter of dispensation, and was within two years thereafter raised to the Bench of the Court of Session, when he took the title of Lord Mersington, from his lands of that name, in the parish of Eccles. This appointment is said to have been made “to oblige the Presbyterians.”‡ And it is certain that the new judge acted zealously with that party in the troubles immediately preceding the Revolution. Thus we find him among the “discontented

* Chalmers' *Caledonia*, vol. ii., p. 375.

† It is so stated in the “*Case of John Swinton of Swinton in relation to his Father's pretended forfeiture*,” printed in 1690, when Alexander Swinton was still alive.

‡ Earl of Balcarras' *Memoirs*, printed for the Bannatyne Club, p. 12,

gentlemen,"* as a contemporary writer calls them, who accompanied the Provost and Magistrates of Edinburgh, and a large crowd, in an attack on the Palace of Holyrood, for the purpose of taking revenge on one Captain Wallace, who, on the previous day had ordered his men to fire on a number of the inhabitants. In one account of this affair Lord Mersington is described, as "the fanatical judge" heading the rabble with "a halbert in his hand, and as drunk as ale and brandy could make him." But this passage, which has been ascribed to Lord Balcarras,† occurs, not in the genuine edition of that writer's memoirs, but in one of the "transcripts so mutilated and interpolated as frequently to be unintelligible, and in many instances to reflect the opinions and sentiments of the copyist, rather than those of the original author."‡ And there can be little doubt that the story in its aggravated form is wholly unfounded. Lord Mersington was the only judge in Scotland who sat on the bench at the period of the Revolution, and was re-appointed after it. His death in August, 1700, is thus described by the Lord Advocate, Sir James Stewart, writing to Principal Carstares:—"On Tuesday last the Lord Mersington dined well with a friend in the Merse, and went well to bed, but was found dead before four in the morning—his lady in bed with him, who knew nothing of his dying. A warning stroke. He was a good honest man, and is much regretted."§ He was twice married. By his first wife, a daughter of Sir Alexander Dalmahoy, of that Ilk, he had two sons, of whom all we know is that they "went to England."|| There have been, and are, more than one family of the name south of the Tweed. But the only English Swinton known to fame, and who may possibly have been a grandson of Lord Mersington, is the Rev. John Swinton, Fellow of Wadham College, Oxford, born at Bexton, in Cheshire, in 1703.¶ He was a

* Earl of Balcarras' Memoirs, printed for the Bannatyne Club, p. 16.

† Brunton and Haig's Historical Account of the Senators of the College of Justice, p. 432.

‡ Preface by Lord Lindsay to the Earl of Balcarras Memoirs.

§ Carstares' State Papers, p. 625.

|| Douglas' Baronage of Scotland, p. 131.

¶ A. Swinton, Esq., was the author of "Travels into Norway, Denmark, and Russia, in the years 1788, 1789, 1790, and 1791." London, 1792. There is also a family of Swintons in the United States.

learned antiquary, and an extensive contributor to the *Philosophical Transactions* and the *Universal History*. Being addicted to occasional absence of mind, the story is related of him, that preaching the condemnation sermon before some criminals who were to be executed the following morning, he told his audience that he would give them the remainder of his discourse next Lord's day. Lord Mersington's second wife was Katharine Skeen, of the family of Hallyards, by whom he had two sons and seven daughters. Both sons were officers in the Dutch service, and were killed in the French trenches at the battle of Malplaquet. The eldest daughter Mary, was by her second marriage to Brigadier-General James Bruce, of Kennet, an ancestress of the family to which the title of Lord Balfour of Burleigh was adjudged by the House of Lords in 1868. Helen, the fifth daughter, became the wife of Colonel Francis Charteris of Amisfield. That name and estate their only daughter transmitted to the noble family of Wemyss, by her marriage to James the 4th Earl. Lord Mersington's other daughters married Sir Alexander Cummin of Culter, John Belsches of Tofts, Swinton of Laughton, Laurence Drummond, a brother of the laird of Pitkellony, and Sir Alexander Brown of Bassendean.

Robert, the third son of Sir Alexander Swinton of Swinton, commanded a troop of horse at the battle of Worcester, and was killed while attempting to carry off Cromwell's standard, which he had seized. The fourth son, James, is said to have been engaged in the same battle.* But the writer who makes the statement may have confounded him with his brother Alexander.

The fifth son was George of Chesters, writer to the signet; the sixth, David of Laughton, merchant in Edinburgh.

XX. JOHN SWINTON of Swinton, the eldest son of Sir Alexander, was a man of great ability, and very varied fortunes. Before succeeding to the family estate by the death of his father in 1652, he was chosen one of the Committee of Estates, and appointed a commissioner for the plantation of kirks. He was also named one of the Colonels for Berwickshire, for putting the kingdom into a posture of defence. Nevertheless, we find him in June 1650, voting against a levy, "when, as the parliament was informed certainly, Cromwell and a strong army of Sectaries were marching

* Douglas' Baronage, p. 131.

down to invade the kingdom.”* In December of the same year he went over to the English forces then occupying Edinburgh. By some of his apologists it has been asserted that this was not a voluntary act on his part, but that he was taken prisoner by a party of Cromwell’s soldiers. And it seems certain that it was as a spectator only, not as a combatant, that he was present with the parliamentary army at the battle of Worcester, where, as already noticed, two, if not three of his brothers fought on the side of the king. In Scotland, however, his offence was looked on as unpardonable. He was excommunicated by the Commission of the Kirk held at Perth, in May, 1651. A decree of forfeiture for treason was pronounced against him by the parliament of the same year. On the other hand he rose rapidly in favour with Cromwell, by whom he was named one of the Council of State for Scotland, and a Commissioner for the administration of justice in that country. He also on several occasions, represented Berwickshire in the English Parliament. The one of his own countrymen who principally shared these honours with “Judge Swinton,” was Sir William Lockhart of Lee. It is not too much to say that by these two the affairs of Scotland were in a great measure administered during the whole period of the Commonwealth. Of the rancour with which they and others who acted with them were afterwards assailed, a curious specimen has been preserved† in a tract printed in London in 1659, under the title of “A lyvely character of sum pretending Grandees of Scotland, to the good old caus, digested into eight queries.”

The query applicable to Swinton is as follows :—

“Whether he be fitter to be a Judge and Privy Councillor in Scotland, or a Stage player at White Hall, who in *anno* 1650, attended the one day the English Council of War at Barwick, the other the Scottish at Edenburgh ; he who before installing of the late Protector, walked humbly and contentedly under his excommunication, was a friend to persons of integrity and honesty, kept sober and honest servants in his family, walked Christianly in his apparel, and seemed a lover of those that feared the Lord ; who, as soon as his master was lift up to a Throne, obtained his sentence of excommunication taken off by the Presbyterians, showed himself zealous in propping this tottering Throne, choosed the most eminent and notorious malignants for his intimate companions, looking upon honest Christians (if not as great as good) with a supercilious eye ; who kept the places of Privy Councillour and Judge in causes civil and criminal, having been equally bred in the knowledge of

* Balfour’s *Annals of Scotland*, vol. iv., p. 80.

† Nicoll’s *Diary*, printed for the Bannatyne Club, p. 237.

all ; besides about 800 pound *per annum* out of my Lord Lauderdale's estate, under the name of 400, albeit many of his creditors be like to perish for want of bread ; who has been active and instrumental in putting known malignants in places of trust ; who scandalously feasted an English lady in his house for several daies, then *pessima fidei* and since justly deserted by her husband, when his own was at London ; who, with his stately lady swaggered with the best of the Court in gallant apparel and powdered periwigs while it lasted ; but now among the first of reformers hath thrown off his false head, gotten shoes cut round over in the foreparts, and speaks nothing but shibboleth to the great satisfaction of all the off-spring of James, turning not only Round-head, but Round-Scot. *Qui nescit dissimulare nescit regnare.*"

The last paragraph of this pasquinade has reference to the circumstance that Swinton had by this time turned Quaker. This step was attributed, by his enemies, to fear of the prosecution with which he was threatened, for the part he had taken in politics. If he had not *trembled*, said they, he would not have *quaked*. But the sincerity of his adherence to the Society of Friends was proved, both by his demeanour at his subsequent trial, and by his life in after years. Being destined, after the Restoration, as a victim to the new order of things, he was, we are told, on the 20th of July, 1660, "taken in King Street" (London) "straight out of his bed in a Quaker's house, and was brought to Whitehall and thereafter sent fettered to the prison of Gatehouse."* Thence he was conveyed to Edinburgh in the same ship with the Marquis of Argyle, whose fate he was intended to share. Being brought before the Parliament to show cause why he should not receive sentence upon his former attainder, he refused to avail himself of any legal pleas, several of which were open to him,† but answered, according to his new religious principles of non-resistance, that it was true he had been guilty of the crimes charged against him, and many more, but that it was when he was in the gall of bitterness and bond of iniquity, and that God Almighty having since called him to the light, he saw and acknowledged these errors, and did not refuse to pay the forfeit of them, even though it should extend to life itself. The calm and dignified bearing of one who had fallen from high estate, made a great impression on his judges ; and Middleton, who presided as Royal Commissioner, is said to have been influenced in his favour by enmity to

* Nicoll's Diary, p. 296.

† See Burnet's History of his own Time, vol. i., p. 127.

the Earl (afterwards Duke) of Lauderdale, to whom the King had already, in anticipation of a conviction, gifted the "lands and lordship of Swinton." The result—attributed by his co-religionists to a special interposition of providence*—was, that Swinton escaped the sentence of death, which awaited others less implicated in the transactions for which he was brought to trial. He was however committed as a prisoner to the castle of Edinburgh, the Decree of Forfeiture was renewed; and two days later the royal gift to Lauderdale was confirmed by the Parliament. Even his imprisonment was, for a time, not without its alleviation, as he was indulged with the society of his wife. But in December, 1662, she died in the castle, after giving birth to a child.† The lady who met this sad fate, was Margaret Stewart, daughter of William Lord Blantyre. By her, whom he married in 1645, Swinton had three sons, Alexander, John, and Isaac, and a daughter, Margaret, who married Sir John Riddell of that Ilk. Whether Isaac or Margaret was the child born in Edinburgh Castle is uncertain. Neither can it be stated positively, how long the father's imprisonment lasted. Some traces of his later life are to be found in the Diary of Provost Jaffray of Aberdeen, who had been his colleague in one of Cromwell's Parliaments, and who is described as a "ringleader" among the Quakers in the North of Scotland, as was Swinton in the South.‡ Neither of them escaped the petty persecutions to which members of the Society of Friends were exposed under the Act against Conventicles. Swinton was also the author of numerous Tracts, vindicating the opinions of the Sect, some of which are still extant.§ And he is understood to have had a principal share

* According to Wodrow, "the Queen Mother and Papists took a care of him, and brought him off." "And indeed," he adds, "quakery is but a small remove from popery."

† Lamont's Diary, (Maitland Club), p. 158.

‡ Life of Robert Blair (Wodrow Society), p. 533.

§ Among them are "A Testimony for the Lord by John Swinton. To all the world to whom these shall come greeting" (six pages without date). "Some late Epistles to the body, writ from time to time as the spirit gave utterance, &c." dated 1663. "One warning more to the hypocrites of this generacon" (MS) dated 7th month, 10th, 63. "England's warning or a friendly admonition to the rulers thereof to beware of prosecuting the righteous for yielding obedience to the call of God, lest by so doing (as they have already begun) they provoke the Most High to judgment, and to pour out

in converting to these opinions Colonel Barclay, the father of the well-known Robert Barclay, author of the work entitled "Apology for the true Christian Divinity as the same is held forth and preached by the People called in scorn Quakers."

The Register of Marriages of the Society of Friends, kept at the Central Office, in Houndsditch, London, records the marriage in 1671, "the 3d day of the 6th month" of "John Swinton, late of Swinton, in Scotland," to Frances White, of Newington Butts. In another copy of the same Register she is designed "Widdow;" and it appears from the family writs that her maiden name was Hancock, her brother being John Hancock, of Wallieford, in the county of East Lothian. Of this marriage there was no family. John Swinton died at Borthwick, in 1679. The editor of Jaffray's Diary, already referred to, has preserved what he calls "two precious documents;" one being Swinton's dying testimony "that the contemned people called Quakers are *a blessed people*;" the other a similar testimony by his widow to the fact that her "dearly beloved husband *laid down his outward man in peace*." In favour of the lady there exists a Deed of gift by Charles II., dated 16th June, 1680, granting a yearly pension of £104 sterling to her and Swinton's two children, Alexander and Isaac. In September of the same year she contracted a third marriage with a Dutchman, named Arent Sonmons, who seems to have been the owner of considerable property in New Jersey.*

XXI. ALEXANDER SWINTON, the Quaker's eldest son, did not long survive his father, to whose religious tenets he early showed a disinclination. Sir Walter Scott† relates how, rising one morning, he could scarcely be prevailed on to assume the plain suit of grey cloth with a slouched hat without loop or button, which had by his father's directions been substituted for the laced scarlet wrath upon them untill there be no remedy which will be speedily accomplished if they repent not, but still go on in the execution of their late cruel edicts." This piece is in verse, quarto, London, 1664. In the Library of the Friend's Institute in Bishopgate Street, where these tracts are preserved, there is also one entitled "Innocence further cleared and the spirit of Alexander, the Coppersmith, further ditected." This piece is by Penn, with an addition by Swinton appended to it, but without a separate title.

* Douglas (Baronage, p. 131) erroneously represents Frances Hancock as the widow of Sonmons when Swinton married her.

† Tales of a Grandfather.

coat, rapier, and other parts of a fashionable young gentleman's dress at the time. In consequence of the forfeiture, he never, of course, had possession of the family estate, and dying unmarried, was succeeded by

XXII. JOHN SWINTON, his brother, who was a considerable merchant in Holland. He also carried on business in London, and is designed "of Lombard Street, Merchant," in the register of his marriage in 1674, to Sarah, daughter of William Welsh, generally said to have been a merchant in London, but described by one authority as "a minister of some note." Of this marriage there was a large family, none of whom survived childhood, except one daughter, Frances, who married eventually the Rev. Henry Veitch, Minister of Swinton. In 1690, John Swinton presented to the Scottish Parliament a petition praying that his father's forfeiture might be rescinded. The case was considered with much deliberation, the Earl of Lauderdale, who had succeeded his brother the Duke, being heard for his interest. An Act of Parliament was ultimately passed annulling the two Decrees of Forfeiture of 1651 and 1661*; and Swinton, now, or shortly afterwards a widower, returned to Scotland, and resumed possession of the family estate, which he found denuded of its old timber, and otherwise greatly dilapidated. Probably to retrieve in some measure the shattered fortunes of the family, he sold the estate of Cranshaws in 1695, to John Watson, merchant in Edinburgh, from whom it has descended through his mother to Lord Aberdour, the eldest son of the Earl of Morton. Not long afterwards we find Swinton styled "Sir John," having no doubt, according to the fashion of the day, been knighted by the Royal Commissioner. He was one of twelve persons in whose favour the act establishing the Bank of Scotland was passed in 1695.† It has been noticed‡ that he was nevertheless a large holder of the stock of the unfortunate Darien company, in rivalry of which the bank seems to have been started. In 1706 he sat in parliament for Berwickshire, and voted in favour of the Union. Of his sayings and doings and those of other Merse lairds, a curious record is contained in a MS diary by George Home of Kimmerghame, preserved in the Marchmont repositories. "Sir

* Acts of the Parliaments of Scotland, vol. ix., p. 221.

† *Ib.*, p. 494.

‡ Burton's History of Scotland from the Revolution, vol. i., p. 285.

John Swinton," writes the gossiping chronicler on the 29th September, 1697, "has gained his mistress the Advocate's daughter, and there is a minute of a contract signed by them." A fortnight later he records that the lady has told her lover that "though she will obey her father in what he commands her, yet if the thing be left to her own choice, and death were laid in one balance, and he in the other, she would choose death." Though after this plain speaking, Sir John is said to be "still courting her" on the 10th of November, we find him married on the 17th of February following to another lady, Anne Sinclair, daughter of Sir Robert Sinclair of Longformacus. Anne Sinclair's mother was Margaret, daughter of Lord Alexander, who was the eldest son of William first Earl of Stirling, the well known poet and courtier, whose name was recalled to the present generation, by an audacious attempt to establish, by forged documents, a claim of succession to his earldom.* In consequence of this connection between the Alexanders and the Swintons, the head of the latter family, fourth in succession to Sir John, was one of three persons to whom an Edinburgh genealogist propounded the idea of claiming as theirs by right of inheritance, the territory in Nova Scotia, which was granted by James VI., and Charles I., to the Earl of Stirling. The scheme was never seriously entertained by the parties interested. But it cost its sanguine projector the life of his son, who, having been sent by his father to Canada to investigate the supposed claim, perished in the loss of the steam-ship *President*, in the spring of 1841.

By his marriage with Anne Sinclair Sir John Swinton had, besides John his heir, three younger sons and four daughters. Robert the second son, merchant in North Berwick, married Catherine, eldest daughter of Rutherford of Fairnylee. Their son, John Swinton, is one of the witnesses to the marriage contract between Walter Scott, Writer to the Signet (Sir Walter's father), and Anne Rutherford, dated 25th April, 1758.† The third son, Francis, M.D., died abroad unmarried. William, the fourth, was also a merchant in North Berwick. Of the daughters Anne, the youngest, died in childhood. Jean, the eldest, married Dr John Rutherford, Professor of Medicine in the University

* See Report of the trial of Alexander Humphreys, or Alexander claiming the title of Earl of Stirling, by Archibald Swinton, Advocate, Edinburgh, 1839.

† Scott Centenary Catalogue, p. 148.

of Edinburgh, and was the grandmother of Sir Walter Scott. Joanna, the third, married Alexander Keith of Ravelstone. Their grandson, Sir Alexander Keith, was created Knight Marischal of Scotland on the occasion of the visit of George IV. to Edinburgh, and died in 1833, leaving as his heiress an only daughter, who became the wife of Sir William Keith Murray, of Ochtertyre, baronet. The second daughter was Sir Walter Scott's "Aunt Margaret,"—a lady, he tells us, "of eminent virtues and no inconsiderable share of talent;"—by whose death by the hand of her maid servant in a sudden fit of insanity, "the first images of horror from the scenes of real life were stamped on his mind." From her lips he gathered in childhood the materials for the tale entitled "My Aunt Margaret's Mirror," first published in the Keepsake for 1828. She also told him, he says, "the unhappy story of the Bride of Lammermoor, being nearly related to the Lord President, whose daughter was the heroine of that melancholy tragedy."* Sir Walter further mentions that the concealment and discovery of the Countess of Derby in Martindale Castle, as told in *Peveril of the Peak*, was taken from a picturesque account of a similar event described to him by Margaret Swinton, by whom it was witnessed in childhood. The lady who alarmed little Margaret, by her mysterious appearance in a room in Swinton House, which she had entered through a sliding panel, the existence of which was unknown to the child, was Mrs Macfarlane, the wife of a Writer to the Signet in Edinburgh, with whom Sir John Swinton seems to have had some business relations. She had sought refuge in the border mansion, after shooting dead with a pistol in her own house in Edinburgh a young Englishman named Cayley, who was a government commissioner on the estates forfeited in the rebellion of 1715. Whether the fatal act was committed in defence of her honour, or to avenge herself on the unfortunate gallant for having boasted of former favours, has been matter of

* The relationship can scarcely be said to have been near. Jean Sinclair, the elder sister of Lady Swinton, and consequently Margaret Swinton's aunt, was by her marriage to John, Master of Bargeny, mother of Johanna Hamilton, who became the wife of Sir Robert Dalrymple, President Stair's grandson.

controversy.* The view of the case most favourable to the

* See Notes to Peveril of the Peak. Chambers' Domestic Annals of Scotland, vol. iii., p. 412. Leighton's Traditions of Scottish Life, second series. The following is the letter referred to in the text:—

“Edinr., October 13th 1716. Sir, I hope you will pardon me for not writing sooner, for you may easily conceive my anxiety and trouble upon account of my present misfortune, of which I shall give you this short account. Mr Cayley was my intimat acquaintance ever since he came to this place, he lodged at Mrs Murray the mert. in the parliament close. She was a kind of guardian to my wife when she was a girl at the schools. Mr Cayley forming a very bad design agt. my wife, and despairing to obtain her consent was resolved to use force, for which purpose Mrs Murray was sent to our house on Saturday the 29th September (a day of the week wherein Mr Cayley constantly went to his country house early in the morning) and desired my wife to come down to her house that afternoon, which she did immediately after dinner, and was received at the door by Mrs Murray, who as soon as she had put her into a room left her for a while, but went out of the house, locked the door and took the key with her, then Mr Cayley appeared who had lurked at home and was denyed to everybody that asked for him, where he used a very barbarous force, the people below stairs hearing the noise knocked at the door, but got no access. In the meantime, I happening to pass through the parliament close saw Mrs Murray in her shop. She asked for my wife. I told her she was well, and that she had seen her which she denyed. I asked for Mr Cayley. She told me he had gone to the countrey early that morning as he used to do. I observed her maid in the shop, who with some kind of uneasiness said she would stay no longer but go down stairs, and that her mistress would be wanted at home; her mistress answered she would not go till her daughter returned whom she had sent an errand, and seeing a boy her son in the shop I thus understood her whole family was abroad and something extraordinary was doing at home; therefore I went towards her house and I observed her looking after me, and sending her son to notice where I went. I immediately grew suspicious, but checked myself, and went down to Mrs Sarah Dalrymple's where my wife came in a little after me and told us she had been at Mrs Murray's; none can express the torture I endured, my wife slept none and we were both in great agony, I enquired for Mr Cayley on Munday but could not find him. On Tuesday I hapned to be a little busy, which Mrs Murray understanding sent up Mr Cayley in the afternoon to our house, who went directly to my wife's bed chamber; and there being but one maid in the house and she at a distance from the room, my wife upbraided Mr Cayley; but he resolving to have his purpose at any rate before he left Scotland, which he was to do in a day or two, laid hands on my wife, and threw her on the bed; she struggled and drew his sword which he soon wrested from her and continued his attempt. She justly transported with indignation ran to my pistols, cocked them both offered him one of them to use against her, but he coming forward to throw her again on the bed, she shot him dead. She sent to enquire for me and in

lady's fair fame, is supported by a letter from her husband to Sir John Swinton, which has been discovered among the family papers, and also by the fact, that though fugitated by the Court of Justiciary, she returned to Edinburgh, where she lived and died without being brought to trial. Sir John Swinton died in 1725, and was succeeded by his eldest son,

XXIII. JOHN SWINTON of Swinton, Advocate. He is honourably mentioned as one of the earliest promoters of agricultural improvement in Berwickshire, having "about the year 1730, impelled by a spirit of patriotism as well as of interest, drained,

an hour after I came home, my wife very conscious of her innocence inclined to send for the magistrats and Mr Cayley's friends and to tell them the whole story. I judged that too rash, therefore I sent her away. She was very well in her health when I saw her last, and told me that which I have said above and to severall others who saw her. Malice and envy are now hard at work, but to you, Sir, and your Lady who know my wife so well I need not justify this action, the good and the wise are for us, the rest of the world are not much to be regarded; my wife's integrity virtue and innocence are testified, that gives me comfort, and will make her still dearer to me. Neither of us suspected a crime so horrid would be committed by a man we both esteemed for his civility and good breeding, and who saw us very happy in the enjoyment of one another. I offer my humble duty to your Lady and family.—Excuse this confusion, I am, Sir, Your most obedient humble servant,

JOHN MCFARLANE.

Do me the favour to send this
to Sir Robert Sinclair.

A precognition was taken, which with the circumstances of the room and my wife's clothes and his, prove the fact as I have told it. Mrs Murray still denies that she had seen my wife that afternoon, but owns that Mr Cayley was privately at her house pretending he was sick, and that they went out to the cuntry about six in the evening."

There has also been preserved part of a copy of a letter from Mrs Macfarlane to Lady Swinton, dated Nov. 26, 1716, in which, after complaining vehemently of the "malicious lies and falsehoods" with which her reputation had been assailed; she adds, "As to the fatal accident your Ladyship has good nature enough to believe that nothing less than the most unworthy provocation would have occasioned it. The story as it was written to you is too true. I am far from justifying the unlucky action or glorying in it as my enemies falsely say. But I earnestly hope and pray that the same good God who permitted my weakness to be tried, may mercifully forgive my faulty rashness and vindicate me in as far as I am injured, and as to what concerns the world, I am fully convinced that if ever the virtuous part of it come to any tolerable knowledge of my case, it will find me much more the object of pity than of insolence."

marled, and completely inclosed his whole estate.”* Some of his high double hedges still exist, to the dislike equally of farmers and foxhunters. He married Mary, daughter of the Rev. Samuel Semple, minister of Liberton, by his wife Elizabeth, daughter of Sir Archibald Murray of Blackbarony. Of this marriage there were six sons and six daughters. Anne, the second daughter, married Robert Hepburne of Baads, and was the ancestress of the Hepburnes of Clerkington, and the Mitchells of Middleton. Katherine, the youngest daughter, married Walter Ferguson, Writer in Edinburgh. He was owner of portions of the land on which the new Town of Edinburgh was built, and his wife’s name is preserved in Catherine Street and Swinton Row. Of the sons of John Swinton and Mary Semple, Pringle, the youngest, did not survive infancy. Robert, the third, and Francis, the fifth, died in the service of the East India Company. Samuel, the second, captain R.N., married Felicité Jeanne le Febre, daughter of an officer in the French guards, killed fighting on the steps of the palace of Versailles, early in the Revolution. Their second son, Samuel Swinton of the East India Company’s Civil Service, purchased from his cousin in 1829, the family estate. After being life-rented for some years by his widow, it devolved, by the deaths of her three brothers, on his eldest daughter Anne Elizabeth, widow of her cousin George Swinton, and now, in her own right, Mrs Swinton of Swinton. The fourth son of John Swinton and Mary Semple was Archibald Swinton of Kimmerghame, who served with distinction in India as aid-de-camp to Lord Clive. He married Henrietta, daughter of James Campbell of Blythswood. Their eldest son, John Swinton, at one time of Broadmeadows, assumed in 1850 the additional surname of Campbell, on succeeding in the estate of Kimmerghame his aunt Miss Mary Campbell, by whom that estate, which had been sold by his father in 1803, was re-purchased in 1846.

XXIV. JOHN SWINTON of Swinton, the eldest son of John Swinton and Mary Semple, was admitted a member of the Faculty of Advocates in 1743, and after having been for many years Sheriff of Perthshire, was raised to the Bench as Lord Swinton in 1782. It is said of him by an excellent judge of

* Bruce’s Appendix to General View of the Agriculture of the County of Berwick, by Alexander Lowe, 1794.

character, who knew him "as much as a youth can know an old man;" "he was a very excellent person; dull, mild, solid, and plodding. It is only a subsequent age that has discovered his having possessed a degree of sagacity for which he did not get credit while he lived. So far back as 1765, he published an attack on our system of entails; in 1779 he explained a scheme for a uniform standard of weights and measures; and in 1789 he put forth considerations in favour of dividing the Court of Session into more courts than one, and of introducing juries for the trial of civil causes." "All these improvements," adds Lord Cockburn,* "have since taken place, but they were mere visions in his time; and his anticipation of them, in which, so far as I ever heard, he had no associate, is very honorable to his thoughtfulness and judgment." The "mild" Judge lived on terms of close intimacy with Henry Erskine; and his slowness in apprehending a joke is illustrated by the habit, which has been attributed to him, of listening in silence to the brilliant sallies of his witty friend, and long after the rest of the company had regained their gravity startling them by a hearty laugh, and the exclamation, "I hae ye noo, Harry." In his time the Mansion House of Swinton was burned to the ground—tradition says for the second time—and rebuilt in a plain but substantial style in 1800. He married Margaret, daughter of John Mitchelson of Middleton, by whom he had six sons and six daughters. The sons were (1) John, his heir; (2) Samuel, a general in the army and colonel of the 74th Regiment; (3) Archibald, Writer to the Signet; (4) Robert, Major, H.E.I.C.S.; (5) George, chief secretary to the government of Bengal, who married Anne Elizabeth, daughter of his cousin Samuel, and now, as already mentioned, Mrs Swinton of Swinton; (6) William, colonel in the East India Company's army. All the daughters died unmarried except the fourth, Elizabeth, who became the wife of the Honble. Colonel Carnegie, 3rd son of the 6th Earl of Northesk. They had a son, who married, but died without issue. Lord Swinton died on the 5th of January, 1799, and was succeeded by his eldest son,

XXV. JOHN SWINTON of Swinton, Advocate, Sheriff of Berwickshire from 1793 till his death in 1820. He married his cousin Mary Anne, daughter of Robert Hepburne of Clerkington,

* *Memorials of his Time*, p. 112.

by whom he had two sons, and two daughters. Isabella, the elder daughter, died unmarried; Margaret, the younger, married the Rev. James Smith, minister of Kelso, and died without issue.

XXVI. JOHN SWINTON of Swinton, the eldest son, survived his father nine years, and died unmarried in 1829; when the estate of Swinton was, as already mentioned, sold to his cousin, Samuel Swinton. The line of the family was carried on by his brother,

XXVII. ROBERT HEPBURNE SWINTON, the second son of the Sheriff. He purchased the estate of Langside in Peeblesshire; to which he gave the name of Swinton Bank; and died in 1852, leaving by his wife Julia, daughter of Thomas Harker of Spring Hall, three sons and two daughters, Julia Frances, and Mary Anne Jane. The latter is married to Benjamin Nicholson, Esq. Of the sons, William Murray, the youngest, died in 1862. The second, Robert Hepburne, Commander in the Royal Navy, married *first*, Eliza, daughter of James Hunter of Hafton, who died in 1863, leaving a son, Robert Hepburne, and a daughter, Eliza Susan Eccles; *secondly*, Caroline Jane Ross, daughter of Henry Kendall, Esq., by whom he had one daughter who died young; *thirdly*, Alexa Hugh Monro, daughter of Colonel Campbell of Ormidale, by whom he has a son John.

XXVIII. JOHN EDULFUS SWINTON, eldest son and heir of Robert Hepburne Swinton of Swinton Bank, was Captain in the Indian army. He married Frances Jane, daughter of Daniel Ainslie of the Gart, and died in 1871, leaving a daughter, Catherine Elizabeth Ainslie, and a son,

XXIX. JOHN EDULF BLAGRAVE, (born 1864) who is now the head of the ancient family of Swinton of that Ilk.

Ornithological Notes. By ROBERT GRAY, F.R.S.E., F.S.A., Scot.

ROUGH-LEGGED BUZZARD (*Buteo lagopus*).—Since the date of my last communication (April, 1877), various specimens of this Buzzard from the Border counties have come under my observation, although there has been no actual irruption of the species during that interval similar to what took place in 1876. The latest dates of its occurrence for 1877, are as follows:—(1) one—a female shot at Innerleithen, on 28th April; (2) one—a male shot at the same place on 1st May; and (3) several seen flying about in various parts of Peebles-shire in the first and second week of May.

COMMON BUZZARD (*Buteo vulgaris*).—A female of very dark plumage was shot at Yester, Haddingtonshire, on 2nd June, 1877. It was small in size, not exceeding in measurement and weight an ordinary male bird. This bird had evidently been sitting quite recently as the breast was bare of feathers. The eggs in the ovary were of very small size.

FIELDFARE (*Turdus pilaris*).—Large flocks of this bird were seen flying about in the neighbourhood of Edinburgh as late as the second week of May, 1877. One or two isolated pairs (m. and f.) in full breeding plumage were also observed within a few miles of the city still later in the season, and several of these were examined by me in the flesh. These flocks had obviously come from the south and were *en route* for their breeding quarters, though their departure had been delayed beyond the usual time.

BLACKCAP WARBLER (*Sylvia atricapilla*).—This warbler, as is now well known, remains with us in limited numbers throughout the winter months, subsisting upon berries and fruits of various kinds. A male bird, now on the table before me, was killed with a catapult by one of the boys at Merchiston School, near Edinburgh, on 5th January, 1877.

KINGFISHER (*Alcedo ispida*).—I am glad to say that this beautiful bird has, of late years, increased considerably in numbers on all our rivers and streams. The same remark applies to many other districts in Scotland, which I have visited. It is especially abundant on the river Tay and its tributaries.

TURTLE DOVE (*Columba turtur*).—A pair—male and female—were shot near Dunbar, on 7th June, 1877, and sent in the flesh to Mr Small, taxidermist, Edinburgh, in whose hands I saw them.

STOCK DOVES (*Columba ænas*).—Two specimens were recently shot on the Brankston Grange and Tulliallan estates. One of these was exhibited by John J. Dalgleish, Esq., of West Grange, at a meeting of the Royal Physical Society of Edinburgh. Writing on 18th April of the present year, Mr Charles Watson, solicitor, Dunse, states that a few months ago he was shown a specimen of the Stock-dove shot in the woods of Dunse Castle, and that the gamekeeper had informed him that Stock-doves have bred there for several years.

CAPERCAILLIE (*Tetrao urogallus*).—This fine bird has now apparently established itself in the county of Fife, and I have no doubt that in a short time, if unmolested, it will extend its flight to the shires of Haddington and Berwick. One was killed in Fifeshire on 13th August 1877, and another was shot by Lord Rosebery at Dalmeny Park, Midlothian, on 2nd November last. The Capercaillie has likewise of late years appeared in Clackmannanshire, and is now found in the woods of that county in considerable numbers, as well as in the adjoining parishes of Tulliallan and Culross, which form a detached portion of the county of Perth, and extend to the banks of the Forth.

SPOTTED CRAKE (*Crex porzana*).—One killed at Portobello, on 3rd October last, was shewn to me by Mr Small. The species is but sparingly met with in any quarter of our district, owing for the most part to its skulking habits and aversion to take wing when disturbed.

GREEN SANDPIPER (*Totanus ochropus*).—A male bird of this species was shot at Chirnside, Berwickshire, on 1st May, 1877, and was sent to Edinburgh for preservation, where I had an opportunity of seeing it.

BLACK-THROATED DIVER (*Colymbus arcticus*).—I observed considerable numbers of this Diver in the bay off Portobello, on 22nd September last. I was shewn three specimens which were taken about that season of the year on a fresh water loch at Inchrye, in Fifeshire. These birds had their dorsal plumage covered with spangles, but their throats were white. On the same occasion Great Northern Divers were obtained in like plumage, also several Red-throated Divers—the last-named however having entirely thrown off their summer dress. I found in the stomach of one of the Red-throated Divers, two Shore Crabs, measuring one inch and a quarter across the carapace.

COMMON POCHARD (*Fuligula ferina*), SCAUP DUCK (*Fuligula marila*)—On 13th April last, when walking along the shore between Longniddry and Aberlady Bay, I observed numbers of these ducks evidently paired, sitting on stones preening their feathers. Their perch was, in each case, surrounded by shallow water, and the birds were apparently so unaccustomed to any disturbance that they allowed me to walk within stoning distance. On plunging into the water they merely paddled out of reach of the missiles which I threw at them, and looked back in evident wonderment on experiencing such rough treatment. Farther out, and at some distance from the beach, some hundreds of Common and Velvet Scoters were grouped in fishing companies and enjoying the rich supply of shell fish for which the locality is noted.

LONG-TAILED DUCK (*Harelda glacialis*).—Unusual numbers of this interesting duck have been seen during the past winter in the Forth and Tay Estuaries. Simultaneous with a great fall of snow, which took place on the 1st April last along the shores of the Forth, the Long-tailed Ducks gathered in one immense flock and indulged in a noisy concert during the night. On the following day, however, they disappeared with the snow which, although it lay in many places seven inches in depth, melted with unusual rapidity. At grey dawn on the morning of the 2nd, when every branch and twig presented the extraordinary appearance of being literally loaded with snow, Missel Thrushes, Blackbirds, and Mavises were in full song as if in joyful expectation of the fine weather which immediately followed.

SABINE'S GULL (*Larus Sabinii*).—A young bird of this very rare British species was shot on 2nd October, 1877, three miles from North Berwick, and is now in the collection of Dr Crombie of that town. I had an opportunity of seeing the bird in the flesh.

Coventina's Fountain at Procolitia. By the Rev. J. C.
BRUCE, LL.D., F.S.A., &c.

The most remarkable discovery that has been made of late years on the line of the Roman Wall occurred last autumn at a spot just outside the station of Procolitia, the modern Carrawburgh. As the Berwickshire Naturalists' Club have to-day visited the neighbourhood of this famous exploration, and some of its members have been at the site, it is natural that they should wish to be informed of all the circumstances connected with it. I have been asked by our excellent secretary to undertake this task. As a member of the Club of some years standing, I feel that I ought not to refuse. One difficulty faces me. Mr Clayton, the owner of the estate on which the discovery has been made and of the treasures which have been produced; by whose orders and at whose expense the excavations were made; who has personally watched the operations from day to day; who has carefully investigated kindred discoveries in this and other lands; has himself learnedly discoursed upon the subject in two papers read before the Society of Antiquaries of Newcastle-upon-Tyne. These will shortly be published in the *Archæologia Æliana*, accompanied by illustrations provided by his liberality. Now, it is impossible for me to traverse the ground before us without trespassing somewhat upon Mr Clayton's manor. However, I am sure he will forgive, and you will applaud me for doing so. There are, moreover, some fragments of information which have not yet been gathered up; these I will endeavour to place before you.

PROCOLITIA is the Roman name of a stationary camp on the line of Wall built by Hadrian between the estuary of the Tyne and of the Solway. It is about 25 miles west of Newcastle. The camp—for centuries a scene of busy life—is now a grass-grown mound, depastured by sheep and oxen.

Outside its western rampart is a depression in the ground along which there formerly flowed a considerable stream. The stream had its origin partly in the "day water" which in winter and in wet seasons collects in its vicinity in considerable quantities, but chiefly in a spring which formerly gushed from the western bank of the valley both in summer and winter with considerable force. When the Romans occupied the station, the

channel of the stream was probably kept clear, but when they deserted it, and when the dwellings which they had constructed on both of its banks were thrown down and left to encumber the ground, the stream would have to find its way as best it could through an obstructed course. In consequence of this, the little valley was eventually converted into a peat bog, called the Strands, and it was frequented by wild geese and wild ducks. The water which issued from the spring was highly prized by the inhabitants of the neighbouring farm houses, it being considered good for making tea and all victualling purposes. It is described as issuing from the ground in quantities sufficiently great (if stored) to drive a mill for eight hours out of the twenty four. One farmer when speaking of its former condition, said, that if he had known that the water of the well had passed through so much oxydized copper, as it now seems to have done, he certainly would not have touched the tea that was made of it. For the last seven years or thereabouts the spring has ceased to appear, its sources, as is supposed, having been interfered with by the drifts of some lead mines which are situated in the valley of the South Tyne. If all the tales be true which are told of the nymphs presiding in ancient and mediæval times over fountains and sacred fanes, they were not the meekest of personages. Coventina, the goddess of this well, has had ample revenge upon the destroyers of her fountain. The mine which is supposed to have been in fault was "drowned out" for several months, a pumping engine which cost something like £5000 had to be erected, and the money expended annually upon the coal necessary to drive the machinery must amount to a considerable sum.

More than a century ago the attention of the Rev John Horsley was called to this spring. At page 145 of his great work, the "*Britannia Romana*," he says, "The buildings without this fort (Carrawburgh) have been chiefly on the west side, where about a year ago they discovered a well. It is a good spring, and the receptacle for the water is about seven feet square within, and built on all sides with hewn stone; the depth could not be known when I saw it, because it was almost filled up with rubbish. There had also been a wall about or an house built over it, and some of the great stones belonging to it were yet lying there. The people called it a cold bath and rightly judged it to be Roman."

In consequence of the diversion of the feeders of the spring,

the stream in the summer time no longer flows, and the peat bog has become shrivelled up and dry. By this means the site of an important building outside the camp and on the east side of the stream became visible, which was excavated by Mr Clayton in 1874, yielding the important sculptured stones and inscriptions which form Nos. 924, 926, 927, 928, 929, and 930 of the *Lapidarium Septentrionale*.

The well on the west side of the little valley had by this time been almost lost sight of, when the explorations of some miners seeking for a vein of lead-ore last year, recalled attention to it. They came upon some dressed stones, forming part of a wall; this at once informed them that the ground had already been disturbed, and that they must go elsewhere for the object of their search. Mr Clayton, who had long intended to make search for the Roman bath of Horsley, hearing of the circumstance, resolved at once to set to work and clear up all doubts about the fountain and the sanctuary which surrounded it. Important results soon rewarded the labours of his explorers.

The masonry of four strong stone walls forming the sides of the well or reservoir were soon exposed. The walls were found to be backed up on their outer side by a mass of clay two feet thick, thereby rendering them impervious to water. The size of the well was 8 feet 4 inches by 7 feet 2 inches inside measurement; and its depth was found to be 7 feet. It must however have been originally deeper than this; for several of the stones of the upper courses had been removed from their position and thrown upon the top of the material which filled up the well, apparently with the object of concealing and protecting it. The stones had to be broken before they could be removed.

When the whole of the material had been taken out of the reservoir, it was found that the masonry was resting upon a natural, gravelly bed, and that this formed the bottom of the reservoir. In the south wall of the structure two apertures or channels, one of them about mid-way down, the other at the bottom, were observed leading outwards. How far these channels extended or where they went to has not been ascertained; the excavator however put his arm into them to its full extent without meeting with any hindrance. These channels may have led to some receptacle in which invalids resorting to the well may have bathed. Mr Clayton intended examining the ground to

the south of the well this summer, with the view of ascertaining the facts of the case; the excessive wetness of the season has however prevented any deep cuttings being made. But the surface has been examined, and the foundations of walls three feet thick have been found surrounding the well and exactly parallel with its walls. They give an enclosure, measured on the inside, of 40 feet by 38 feet, and are no doubt the remains of the temple which was sacred to the goddess of the fountain; as shown in Plate on the opposite page. The entrance to this fane is by a doorway on its west side. To the west of this structure again are traces of other foundations; these have probably formed parts of the residences of the priests.

We now come to the consideration of the contents of the reservoir. These consisted of a mass of coins, altars, sculptures, pottery, glass, bones, rings, fibulae, dice, beads, sand, gravel, stones, wood, deer's horns, iron implements, shoe-soles, and a due proportion of mud. I may remark before proceeding further that two theories have been propounded by way of accounting for this vast accumulation of objects; according to some, the articles have been thrown into the fountain from time to time as an offering to the nymph who presided over it; according to others they have, in a time of panic been hid there by way of security. Before discussing either view let us attend to the facts of the case.

Shortly after removing the earth and the stones which blocked up the mouth of the well, and which, whether intended to conceal the treasure below or not, had effectually served that purpose, a mass of coins of the lower empire was met with. The stones forming the covering of the well were lying in all positions—tumbled one upon another—and many of the coins were lying above them. The coins were in such quantity that they might have been shovelled off those of the stones which were lying in a horizontal position. The excavators think that the coins which were lying on the stones (the small coins of the lower empire) had been forced into their position by the strength of the spring. There were probably five or six thousand coins in this upper portion of the well. Many of them were highly corroded by the oxydizing influences to which, for centuries, they had been exposed. As the coins of the lower empire are much smaller than those of the higher, they would naturally suffer more than the

others from this cause. All the way from top to bottom, the well was crowded with coins, with crockery, bones, and deers' horns. Tailford, the excavator in chief, tells me that all the vessels and bottles that were whole were found lying on their sides. This is an important fact. Another is worthy of observation; some fragments of Samian ware that had formed parts of the same vessel were found lying in different parts of the well; the vessel must have been thrown in, in a fragmentary state. Some beads of the same kind (though not all of the same size) were found, not together, but scattered about. The necklace, if such it were, cannot have been thrown in whole.

About a yard down 15 altars were found lying in all positions, most of them inscribed; and a little below them the sculptured slab, known in the district as "the ladies" on which are carved with considerable skill three water nymphs—the attendants probably of the chief deity of the fountain. The woodcut on the opposite page shows this sculptured stone.* The upper part of a human skull was found in this part of the excavation full of coins. The next important discovery that was made consisted of four gold coins—one of Nero, a good deal worn and a good deal clipped; one of Sabina, the wife of Hadrian; one of Antoninus Pius; and one of Julia Domna, the wife of Septimius Severus. These last three coins are in excellent preservation, and are admirable specimens of the Roman mint.

The occurrence of four gold coins shews the richness of the find. Mr Clayton has during the last quarter of a century conducted extensive excavations in the camps and castles of the Wall, but never before was so fortunate as to discover a single gold coin.

At about the same depth and near the N.E. corner of the well was found a mass of clay about 18 inches in bulk, in which were imbedded about 50 or 60 large brass coins. The clay was exceedingly fine and of a blue tint. It had been purposely deprived of all gravelly or sandy particles, and had a soapy feel. As the coins had been protected by the clay from the action of the air and water, they came out of it in an uncorroded state, many of them shining like gold. Several of them were as fresh

* This woodcut and the others used in illustration of this paper have been kindly lent by John Clayton, Esq., of Chesters, the author of the papers already referred to.

and sharp as when they first issued from the mint, but others of them bore marks of wear. It is perhaps needless here to remark, that the large brass coins of the higher empire, and some also of the second brass, were made of a compound metal, usually called Corinthian brass, which has much of the appearance of gold. A number of the coins of this "find," which were valueless as coins, from their worn condition, have found their way into the hands of some workers in brass and iron, by whose ingenuity they have been converted into rings and seals of considerable elegance, and having all the appearance of gold. These works of art now adorn the persons of many of our modern belles. The fact that very many of the coins of this find are so much worn by circulation as to have the die-stamp utterly obliterated, both on obverse and reverse, while others are in a nearly perfect state, requires some explanation. Upon the theory that the coins in the fountain were the gradual accumulation of votive offerings, we would expect to find the perfect coins at the bottom, and the upper strata of coins (of the same emperors) becoming less and less distinct as having been longer in circulation. The more perfect were mixed with the less perfect, and with absolutely obliterated ones. This was the case with those which were deposited in the clay; and these must all have been deposited contemporaneously. The coins at the bottom of the well were perhaps more worn and less easily decipherable, than were the general mass. The fact of the varying condition of the coins may perhaps be explained in the following manner. At a time when coin was the only circulating medium, and when paper money and banks of deposit were unknown, persons possessed of a larger amount of wealth than was necessary for their immediate wants, would probably hoard up their resources. In this way coin might be preserved for two or three generations, and when it was set at liberty by some spendthrift heir, it would mingle with a mass of pieces which had borne the wear and tear of perhaps half a century. How the coins that I have been referring to came to be embedded in clay I cannot conceive. It cannot have been an accidental occurrence; the clay as I have said had been wrought, and it differed from that by which the masonry of the fountain was backed up. About the middle of the well another important discovery was made. Two vases of red clay and of a highly ornate character were found, lying on their sides.

These are shown on the page opposite. They have evidently been of local manufacture, for they differ in every respect from the vessels usually found in Roman stations. Each of them bears an inscription which had been cut on the vessel before being burnt, by some sharp-pointed instrument. Upon one of them the inscription reads :

COVENTINA[E] A[V]GVSTA[E] VOIV[M] MANIBVS SVIS SATVRN-
INVS FECIT GABINIVS—"Saturninus Gabinus with his own hands
made this offering to Coventina Augusta." On the other vase a
similar inscription occurs, but in a more contracted form.

These vases may have been used for holding flowers, or other offerings to the nymph, and they would occupy a prominent position in the temple of the goddess.

A little below the vases, near the N.W. side of the well, other ten altars were found all together, lying in a heap.

Resting on the bottom of the well, though still surrounded by a mass of coins, bones, gravel, and pottery, were found two more altars and a slab, bearing, in addition to a dedicatory inscription, a sculptured representation of the water deity herself. This is represented in the woodcut opposite page 365. None of these objects were lying flat, as we should expect they would, if thrown by themselves into a well filled with water. The slab was on its end, leaning slightly towards the north wall of the well, though not touching it in consequence of intervening matter; the two altars were also standing on their bases, though leaning somewhat to one side.

The bottom of the well, as I have remarked already, was unpaved, and consisted of sand and gravel. Several little conical heaps of sand were found on the bottom; they having no doubt been formed by the gushing upwards of the water in various minute springs. The bottom of the well was probed by an iron bar, but no obstruction was met with. Some of the coins had, however, sunk into the earth, below the bottom of the well.

The slab bearing the image of the goddess represents her seated upon a gigantic leaf of the water lily. Her garments float as moved by the stream; her left hand rests upon a globular vase from which flows a stream of water; in her right hand she holds a branch, perhaps of olive, or perhaps of some water plant. The inscription bears testimony to the fact that the dedicator in this case is no less a personage than Titus Domitius Cosconianus,

the prefect of the first cohort of Batavians, who garrisoned the camp of Procolitia.

Mr Hugh Miller, residing at present at Wark, and a member of the Geological Survey, was present during the excavation of the last foot and a half of the tank, and he has favoured me with his observations upon what he saw. He was (I may remark) impressed with the idea that the contents of the well had been gradually deposited. I give his views the more readily, as I am myself of opinion that the greater part of the material had been thrown in at one time, and in a season of panic. He says, "the remaining foot and a half of the antiquity-bed consisted of stones mostly waterworn, of angular pottery, unworn bones, and coins, packed in a sandy matrix almost like fragile articles in saw-dust—little space being wasted, but close contact usually prevented. The packing material and the stones formed somewhat more than half of the whole mass, and were in the main deposited contemporaneously with the antiquities. The gravel, however, was not distinctly stratified." "Stratification" (Mr Miller goes on to say) "is due to layers either periodically spread or of alternating kinds; a bed of which the separate elements were deposited casually and one by one, would be stratified only so far as the shape of articles might determine their mode of settling down in water. In conformity with this, all articles above the size of a small oyster were laid flat, the concave sides of bits of pottery being directed upwards—the position assumed by shells in sinking through water. One exception noticed was a vessel containing coins, the shifting of which had apparently kept it inverted. This vessel had been shattered and its contents lay thick around it. A vase of Samian ware—filled with sand—lay in a position beautifully suggestive of the supporting medium through which it had sunk intact; its heavier parts were below and it had rested somewhat obliquely on the uneven surface. Bones as well as pottery were extended horizontally, the position especially of shoulder blades indicating that they fell upon what they covered, and were then covered in turn. The coins seldom lay flat, being small enough to feel the roughness of the pebbly surface on which they sank. Their position was that slanting one in which a penny dropped on a gravel beach will generally be found."

Mr Miller concludes his notes thus:—"In order to throw light, if possible, on the character and rate of deposition in the tank, I picked two series of coins, one series from the bottom, the other from a plane a foot and a half higher. The following were recognised by me:—

(1). Bottom series.

TRAJAN	}	Mostly large brass of the higher empire.
HADRIAN		
SABINA		
ANTONINUS PIUS		
FAUSTINA DIVA		

(2). Series one foot and a half from the bottom.

MARCUS AURELIUS	}	Large and small mixed —the former more numerous."
POSTUMUS		
VICTORINUS		
TETRICUS		
MAXIMIANUS		

Thus far Mr Miller. Mr Canon Greenwell, and I, had an opportunity of examining these parcels of coins; and we arrived at substantially the same result as Mr Miller. Both samples of coins were in very bad condition and the most of them were undecipherable. There were 63 coins taken from the bottom. The only pieces which we could recognize were 2 of Trajan, 3 of Hadrian, 6 of Antoninus Pius, 1 of Marcus Aurelius, and 8 of the two Faustinas.

There were 56 coins taken from the slightly higher position—a foot and a half from the bottom—most of them being large brass. Out of this number we could only recognize the following:—Trajan 2, Antoninus Pius 4, M. Aurelius 2, the Faustinas 5, Postumus 1, Victorinus 1, Tetricus and contemporaries 9, and Maximian 2.

We now revert to the objects found in the well. Of the altars that were discovered, 11 were inscribed, and with two exceptions the reading on each is tolerably plain. All the altars are of small size; the largest of them being 18 in. high and 9 in. broad. Most of them are neatly carved and supplied with ornamental mouldings. With one exception they are all dedicated to Coventina, a goddess previously unknown in Roman mythology. She is generally addressed as a goddess (*dea*), but in one instance she is styled a nymph, and in the slab already referred to she is simply called Coventina Augusta. One of the altars is inscribed to the goddess Minerva.

It may be well, by way of example, to give the inscription on one of these, which is shown on the opposite page, referring those who wish for further information, to Mr Clayton's paper, which will soon appear in the *Archæologia Eliana*.

DEAE . SANC

Deæ sanctæ

COVONTINE*

Coventinæ

VINCENTIVS

Vincentius

PRO SALVTE SVA

pro salute sua

V . L . L . M . D

votum libens lætus merito dicavit

Vincentius has, for his own welfare, dedicated this offering to the holy goddess Coventina willingly, gladly, and to a most deserving object.

We next come to the consideration of the coins which were found in the well. So vast a mass of Roman money has not before been found at once in England. The coins were mostly of the kind called first and second brass. Excepting those imbedded in the mass of clay, they were nearly all thickly coated with a crust of the oxyde of copper. Many of these copper coins having lain for several centuries in contact with pieces of iron or silver denarii, had become highly corroded by galvanic action. Very many of the coins had, by being long in circulation, before being deposited in the well, become smooth; the image and superscription which had been enstamped upon them having been nearly or entirely obliterated. Though not noticed at the time there were a great many very small and rude copper coins called *minimi* thrown out with the mud. In addition to the bronze coins there were, as has been already stated, four gold coins found and a number of silver. These silver coins or denarii being for the most part a good deal corroded could not easily be detected; and many of them came into the hands of the numerous persons who, for weeks together, crowded the spot, and carefully sifted the earth which had been thrown out of the well.

Besides the coins which were in this manner, and with the consent of the owner of the soil, variously appropriated, a considerable mass of all sorts were taken away without his knowledge. On the Sunday after the treasure had been discovered, and before much of it had been removed, a number of persons took possession of the well, which it had not been thought

* In this instance the name of the nymph is spelled "Covontina," the more usual way being "Coventina."

necessary to guard, and carried off an unknown number of coins ; not less, it is supposed, than three or four thousand.

The number of coins of all sorts in Mr Clayton's possession is 13,487 ; the number in the well originally cannot therefore have been less than sixteen thousand. Of those in Mr Clayton's possession about two thousand are so much obliterated that they cannot be recognised.

The number of emperors and imperial personages represented in this vast mass of coins is about 90. The earliest pieces are three of Marc Antony's legionary denarii very much worn ; dating from about the year 30 before Christ. The latest coins are those of Gratian who was killed A.D. 383.

Of the early emperors, Augustus and Tiberius are scantily represented. There are 20 coins of Claudius and more than 50 of Nero. There are 6 of Galba and one, a denarius, of Otho. Of the coins of Vespasian and Titus there are 550. Domitian has 485 and Nerva 82. After this the coins become more numerous. Of Trajan there are 1,772 ; of Hadrian and Sabina 2,431 ; of Antoninus Pius and his wife Faustina 2,829 ; of Marcus Aurelius and his wife, the younger Faustina, 1,355 ; of Lucius Verus and his wife Lucilla, 170 ; of Commodus and Crispina, 246 ; after this the coins belonging to each reign are comparatively few in number. Of Severus and Julia Domna there are only 64 ; but the larger part of these (39) are silver. Amongst the coins of the preceding emperors there is but a very small proportion of silver. The emperors between Septimius Severus and Constantine the Great, are for the most part represented by units. Those which number a score or more are Gallienus, 83 ; Claudius Gothicus, 72 ; Postumus, 35 ; Victorinus, 71 ; the Tetrici, 81 ; Maximian, 46 ; Carausius, 25 ; Constantius, 27 ; and Constantine the Great, 200. Those of the family of Constantine are comparatively numerous, though it is difficult to assign each to the proper individual.

In this great "find" no coins previously unknown to numismatists occur. It contains, however, some rare coins and several of great interest. The coins of the two Faustinas are particularly numerous, there being 688 of the elder and 666 of the younger ; showing the powerful hold which these two ladies—not the most fastidious of their sex—had upon the affections of their indulgent husbands. Still more remarkable is the occurrence of 327 second

brass coins struck in the time of Antoninus Pius to commemorate the subjugation of Britain. On the reverse of this coin we have Britannia as a lone and disconsolate female seated upon a rock (indicative of the insular character of the province); her head is unprotected by a helmet, her shield is by her side, her banner is lowered. The Antonine wall had been constructed, and Britain was reduced to its lowest condition. It was cruel thus to remind the unhappy people in their ordinary pecuniary transactions with their conquerors and one another of their wretched position. How vast are the changes which England has undergone whilst these coins were lying in Coventina's well at Procolitia!

Amongst the rare coins may be mentioned a first brass of Didius Julianus, a denarius of Didia Clara; a second brass of Julia the daughter of Titus, a denarius of Clodius Albinus, and a coin of Julia Aquillia. There is also a specimen of the *Disciplina* type of Hadrian, which is rare, and one of the consecration type of Antoninus. In addition to the numerous examples of the second brass Britannias of Antoninus Pius there is a second brass Britannia of Hadrian, a large brass Britannia of Antoninus Pius, and a large brass Britannia of Commodus. Among the interesting coins, we have the *Judæa Capta* of Vespasian and Titus, the *Fisci Judaici* type of Nerva, several of the *Adventus* coins of Hadrian, such as *Achaia*, *Africa*, *Bithynia*, *Hispania*, and the Constantinian monogram on the coins of Magnentius. There are besides these several others, interesting to numismatists, but which need not be mentioned in detail here.

In addition to the coins and altars and vases which were found in the well, several ornaments which seem to have been worn upon the person were discovered. Amongst these were three enamelled fibulæ, three miniature busts of bronze, one of which may be supposed to represent the goddess herself, the other two appear to be personifications of mirth and melancholy, dice, necklaces of beads, and a bone pin with an ornamental head.

We now come to consider briefly the origin of this enormous amount of material. Were the articles thrown into the well from time to time as an offering to the nymph of the spring? or were they deposited there in a time of extreme danger and panic as a place of concealment and security? That offerings, often costly ones, were made to aquatic deities is certain; but is it not more likely that these would be exhibited in the chapels built

over the springs than thrown into the fountains themselves? It is incredible that the priests of Coventina would allow her reservoir to be practically destroyed, by its being filled from bottom to top with such a miscellaneous mass of material as was found in it. The fountain of Bandusia, as described by Horace, was remarkable for its resplendent clearness; "*Fons splendidior vitro*;" this could not have been the case if a mass of bronze coinage, bones and pieces of iron had been thrown into it. Its waters were occasionally tinged with an offering of wine, or the blood of a kid; but nothing seems to have been thrown into it permanently to injure its purity. The shepherds resorting to various pools were taught to pray to the deities presiding over them to pardon them if their cattle in drinking had accidentally polluted them:—

"Nec noceat turbâsse lacus; ignoscite, Nymphæ,

Mota quod obscuras ungula fecit aquas.

Tu, Dea, pro nobis fontes fontanaque placâ

Numina, tu sparsos per nemus omne Deos."*

Ovid. *Fasti*. Bk. iv., l. 757, &c.

Since such was the care with which the purity of a fountain was preserved, it is impossible to suppose that the well at Procolitia, so long as Coventina was supposed to preside over it, should have been filled up to a greater or less extent with a mass of miscellaneous materials, many of which would decompose and pollute the fluid. Coins and vessels of artistic value have in modern times been found in wells and fountains, that had once been the scenes of heathen worship; but can we be certain that these objects had not, as appears probable in the present case, been thrown in for temporary concealment? Can we suppose that vessels so elaborately adorned as the Rudge Cup were made only to be thrown into a well and covered up by subsequent offerings? In the middle ages, offerings of jewels and *ex votos* were exhibited in the sanctuary of the saint presiding over each sacred spot or spring, and gifts of money were used for sustaining the buildings and providing for the necessities and comforts of the priests; but these offerings were not buried in

* Pardon me ye Nymphs if at any time the motion of the hoof has rendered turbid the streams. Do thou goddess, for me, appease the fountains and the deities of the fountains; do thou propitiate the gods that are dispersed throughout all the groves.

tombs or thrown into wells. At St. Winifred's well in Flintshire, I have seen (half a century ago) crutches hung up on the walls inclosing it, but the well itself was left clear. When offerings have been thrown into wells they have been generally of a trifling character, such as crooked pins, pebbles, rags, and flowers.*

Brand tells us that "The leaving of rags at wells was a singular species of popular superstition. I have formerly observed (he says) shreds or bits of rag upon the bushes that overhang a well in the road to Benton, a village in the vicinity of Newcastle-upon-Tyne, which, from that circumstance, is called the Rag Well." (Brand, Vol. ii., p. 380).

The same practice prevailed in Classic times.

"Vallis Aricinæ silvâ præcinctus opacâ
Est lacus, antiquâ religione sacer.

Licia dependent longas velantia sepes,
Et posita est meritæ multa tabella Deæ."†

Ovid's *Fasti* Bk. iii., l. 263, &c.

We can readily conceive that the bushes in the vicinity of Coventina's fountain would be similarly covered, and that on the walls of her temple would be pictures and tablets commemorating the health-bringing power of her waters—leaving the well itself clear.

The mass of altars found in Coventina's fountain proves that the deposit was not a gradual one. An altar is used for the purpose of offering up sacrifice; it is provided with a focus on which to burn the gift; in the well it would be useless. The fact, that two altars and an ornamental slab dedicated to Coventina were found at the very bottom, shews that the well had been free from deposits at the time they were thrown in.

On the theory that the coins were thrown in as offerings, and that the mass was the growth of centuries, we would expect to find the oldest coins at the bottom, and the later occurring in regular succession towards the top. This was not the case; coins of all ages were for the most part found together.

* See Brand's *Popular Antiquities* (Bohn's edition) vol. ii., p. 383.

† "There is a lake in the Valley of Aricia, inclosed by a dark wood, sanctified by ancient religious awe. . . . There the threads hang down, veiling the long hedge-rows, and many a tablet has been placed to the Goddess found to be deserving of it."

Again we would expect to find the freshest coins of any particular reign lying below those which were worn by use; this was not the case; coins in every condition were lying side by side. But overlooking these considerations we cannot but ask what were the priests about, that they allowed so much treasure to lie useless in the well? The deposit theory gives us no answer to this question. That bones of animals and fragments of deers' horns should be found in the well is puzzling. But it should be remembered, that whenever the houses and barracks in the stations, mile-castles or turrets of the Wall are excavated, great quantities of bones are found. The bones found in the well may originally have encumbered the floors of the priests' houses and the temple, and have been transferred to the well during the hasty deposit of the treasure there. The advocates of the deposit theory regard the bones as remnants of the offerings sacrificed to the Nymph. The deities however in whose honour victims were slain, and wine or oil offered, got very little of them. A portion of the entrails of the animal, or a few drops of wine or oil, were burnt upon the altar; the rest formed the feast in which the worshippers and priests indulged. Ovid gives us an idea of the use to which these offerings were put—

“Huc venit, et fonti rex Numa mactat ovem :
Plenaque odorati disponit pocula Bacchi ;
Cumque suis antro conditus ipse latet.
Ad solitos veniunt silvestria numina fontes,
Et relevant multo pectora sicca mero.”*

Fasti Bk. iii., v. 300, &c.

The deity presiding over the fountain of course took nothing by the sacrifice, the priests and perhaps the neighbouring shepherds, decked out in festive attire, partook of the dainties provided. The good things were not thrown into the fountain!

The circumstance that large stones, taken from the masonry of the walls were thrown upon the contents of the well, which, for many centuries, had effectually concealed the treasure beneath—baffling, even, the curiosity of an antiquary as zealous as the learned Horsley—is favourable to the supposition of a hasty rather than of a gradual deposit.

* “Hither comes King Numa, and sacrifices a sheep to the fountain; he then places for the gods cups full of fragrant wine; and with his train lies hid, concealing himself in a grotto. The forest gods come to their accustomed streams, and refresh their parched spirits with copious draughts of wine.”

Since reading this paper to the Club at Chollerford, Mr C. Roach Smith, an antiquary of great eminence, has examined the coins in detail and inquired on the spot into all the circumstances of the deposit. His opinion is in conformity with that which I have ventured to express. In a paper written by him, and read before the Society of Antiquaries of Newcastle, Feb. 4, 1878, he says, "Whatever may have been the exact positions of the coins in the fountain, they do not indicate a careful and gradual deposit; but on the contrary, a sudden and hurried concealment. The altars especially confirm this conclusion. They were intended for the eye, not for burial; but as at Axelodunum, the altars when some great disaster was imminent, were carefully buried; so at Procolitia, those in or around the temple of Coventina, were taken to what was properly considered a place of safety; but while their guardians found for them a secure sanctuary, they never returned to reclaim their treasure or to record their last vows."

If this theory be not considered tenable—the truth still lies hid at the bottom of the well.

On the occurrence of Colias Edusa in 1877. By JAMES HARDY.

THE occurrence of *Colias Edusa*, (the Clouded Yellow Butterfly) throughout the country in 1877, was one of the great entomological events of the period. Without further allusion to this general distribution of the insect, it is merely my object to record one or two of its manifestations in the Border districts, other than those specified in previous communications. Under my own observation its first appearance on the sea-banks near Oldcambus was on June 3rd. It swept suddenly across the steep banks in a wild flight like an Emperor Moth, and then checked itself, and alighted on a dandelion, and then on a buttercup; closing up its wings like a Meadow Brown. Being startled it disappeared round the headlands, leaving a doubt as to the accuracy of the specific identification made during the glimpse obtained of it. Being on the outlook next day, I obtained a nearer view, and was enabled to discern its character. It was

again very wild, resting only for a short interval among the grass; and it did not appear to be attracted to any flower. After a few shiftings it careered away seaward over the black tidal covered rocks. On the 12th of June, being at Dowlaw dean, near Fast-castle, *C. Edusa* was observed frequenting the blossom of the Bird's-foot Trefoil (*Lotus corniculatus*), the principal papilionaceous plant on that coast. Twice I nearly caught one; but it managed to evade my efforts in that respect; and after experiencing a few rash attempts to arrest its free movements, it decamped. It was again visible on the sea-banks at Oldecambus on June 16th; and in an inland dean there, and on an old grass field on the 19th. These were beautiful fresh examples. July 4th terminated its visits, and then it was seated on a footpath. The wings had become much shattered. I never saw more than one in each instance.

Mr Ferguson of Dunse, writes, "I noticed *C. Edusa* on only two occasions. The first was on the 9th June, 1877, on the road between Grant's House and Cockburnspath, directly opposite Penmanshiel Woods; and the second about a month later near Fogo-rig. On both occasions a solitary individual was all I met with. The first was a male insect, very nimble and strong on the wing, and defied all my efforts to capture it; the other was a female, spent and ragged to the last degree. Both specimens, so far as I could judge, were of the normal size and colouring."

Mr George Bolam, about the time of its earliest occurrence, captured one in a garden at Berwick; and Mr A. H. Evans observed one of these butterflies at Scremerston. Dr Stuart and Mr John Anderson have also seen it in their respective localities. Dr Stuart, on the 5th June, noted two specimens on the road across Sunwick Moor, near Fishwick. Thereafter he saw many Clouded Yellows, till the end of the month, but captured one specimen only. "They flew like birds and were exceedingly wild—lighting particularly on the flowers of dandelions. They were new to me; but were seen by many persons all over the country." Mr W. B. Boyd on one occasion during the summer, saw it passing in its usual headlong course across his garden at Ormiston House; and when the Club visited Lilliesleaf, Mr Turnbull had a fresh specimen to show, that had been caught there.

Mr Kelly communicates that about the middle of June, several examples of *C. Edusa* were flying about in Lauderdale, but few

captures were made. At the same period it appeared at Hawick, and a number were secured. Last autumn, while staying at Longniddry, he captured, 8th Sept., seven specimens on the Links, of the autumnal or second brood. The gardener at Laidlawsteel tells him, that it occurred in great profusion in his garden there. The "Entomologist" for August records that it was quite common in the county of Durham, from June 3rd to 14th. A Berwickshire collector had taken ten, including two paired. A very fine specimen was obtained at Jedburgh, by A. Elliot.

Memoir of Robert Castles Embleton, Esq., Surgeon. By
ROBERT MIDDLEMAS.

ROBERT CASTLES EMBLETON was born 14th December, 1806, at Berwick-upon-Tweed. He was the son of John Embleton, of the Berwick Bank, carried on under the firm of Surtees, Burdon, Brandling, and Embleton. The father was born at Morpeth, and married Elizabeth Castles, a native of Berwick-upon-Tweed. The father died early, and the youth was placed at a school kept by Mr Greenwood, of Blyth. At an early age he came to Alnwick, and attended Mr George Trotter's academy, and afterwards that kept by Rev. John Pears, A.M., the first Secretary of the Alnwick Mechanics Institute. Mr Embleton served an apprenticeship of six years to George Wilson, an eminent surgeon in Alnwick, and during his apprenticeship he commenced the study of Botany, Natural History, Electricity, and Galvanism, and lectured during his apprenticeship, upon the last two subjects, at the Mechanics Institute. He became Secretary in 1827, and in the following year proceeded to Edinburgh, where he remained for three years. He went to Coldstream, and was present during the cholera visitations in February, 1832. He showed his zeal and fitness for his profession by his constant attendance upon the afflicted. During that same year he took lodgings at Embleton, where he commenced practice as a surgeon. Five years afterwards he married Miss Mary

Smith, daughter of Aaron Smith, wine merchant, Alnwick, by whom he had three daughters. His wife died in 1840, and one of his daughters shortly afterwards. He continued a widower for about five years, when he married Miss Mary Howey, daughter of Henry Howey, Esq., Pasture Hill, Bamburghshire. Mr Embleton was a successful medical practitioner. He was very attentive and secured the confidence of his patients, while his kind and gentle manner made his presence welcome in a sick-room. He had a large and respectable practice, but it lay widely scattered, and he attributed the spinal affection of his latter days to the long rides he was compelled to take on horseback to see his patients. In 1857, he left Embleton and went to reside at Beadnell Cottage, the property of his sister-in-law, Mrs Taylor, for whom he acted as agent. Before leaving Embleton a large party of friends invited him to dinner, at which the late Mr Geo. Tate presided. Mr Embleton still continued to practice until his son-in-law, Robert Buchanan Graham, took the sole charge of the business. In 1867 he was seized with paralysis, which gradually became worse, until it incapacitated him from all mental and physical exertion. He died at Beadnell Cottage, 6th January, 1877.

Mr Embleton early began the study of botany, and to make a herbarium, and for upwards of 40 years he was an indefatigable collector. He was particularly neat and methodical in arranging, and took great care to get the most perfect specimens. His herbarium shows that he was in correspondence with the most eminent botanists of the day. The publication of Dr Johnston's Flora of Berwick, in 1829, caused him to contemplate making a similar Flora of Embleton and the neighbourhood, and I have seen a copy of the Berwick Flora interleaved and arranged by him with that view, but he did not work it out.

Mr Embleton was, for many years, a careful student of marine zoology. The fishermen whenever they found anything that they had not before observed, always took it to the Doctor. He formed a large collection of native and exotic shells, Crustacea, Echinodermata, &c. Mr Hardy, our worthy secretary, records that Mr Embleton "was the first to discover on these northern shores two rare and beautiful native corals, *Eschara foliacea* and *E. cervicornis*, also a coralline, new to science, *Eudendrium capillare*, from Embleton Bay." He sent Mr Alder, of Newcastle,

Sertularia pinaster and *Retepora Beaniana*, from Embleton Bay, and *Alcyonella stagnorum* from Howick pond.

Mr Embleton was also an enthusiastic entomologist, and formed a collection of Lepidoptera, Coleoptera, &c. During his journeys he was ever on the alert after specimens, and for many years was continually finding objects worthy of notice, which were duly recorded under "Miscellanea" in the pages of our "Proceedings." He was one of the company of naturalists who, with Dr Johnston, in 1831, founded the Berwickshire Club, of which he was three times President, and for many years sole Secretary. In 1859, the late George Tate was associated with him, and thenceforward the principal part of the business was transacted by Mr Tate. Mr Embleton's contributions to the Club's "Proceedings" consist of three well-written Addresses, a Catalogue of the larger Crustacea, and of the Echinodermata, Biographical Memoranda, and his observations (under the title *Miscellanea*) on the Natural History of the district. His other writings are not numerous. To the "Zoologist" he contributed a notice on "Echinodermata," and he furnished Mr Tate's "History of Alnwick" with a complete list of the Vertebrata of the Alnwick district.

Mr Embleton was an able and accomplished naturalist—a careful and accurate observer—and took a deep interest in the advancement of science, and was ever ready to lend a helping hand by sending specimens or notices to those who had special subjects in hand; in this way he aided the Catalogues of the Tyneside Naturalists' Club. He possessed a well-selected library, which contained many early works on Natural History, as well as the most modern publications. His extensive herbarium is now in my possession.

Mr Embleton, for the last ten years of his life, was a sufferer from paralysis, and it is gratifying to record that during his long and serious illness, he had every attention and kindness that affection could bestow; every want was anticipated and provided for by Mrs Embleton and her sister, Mrs Taylor of Beadnell House.

It may be well to mention that Dr Johnston's brother, Mr M. T. Johnston, solicitor, Wooler, married a sister of Mr Embleton; another sister still survives, and is now in her 86th year. John Embleton, a brother, practised as a surgeon at Bamburgh, and died in 1840.

*Donations to the Berwickshire Naturalists' Club, from Scientific Societies, &c., 1877.**

- ALBANY, NEW YORK, U.S.A. Gould (Dr B. A.), Reply to the "Statement of the Trustees of the Dudley Observatory." 1859, 8vo. *The Author.*
- Defence of Dr Gould by the Scientific Council of Dudley Observatory. 1858, 8vo. *The Council.*
- BATH. Proceedings of the Bath Natural History and Antiquarian Field Club, Vol. iv., No. 1. 1878, 8vo. *The Club.*
- BOSTON, U.S.A. Proceedings of the Boston Society of Natural History, Vol. xvii., Parts iii. and iv. Jan.-July, 1876. 1877, 8vo. *The Society.*
- Memoirs of the Boston Natural History Society, Vol. ii., Part iv., No. v. Revision of the North American Poriferæ. By Alphæus Hyatt. 1877, 8vo. *Ibid.*
- CAMBRIDGE, MASS, U.S.A. Annual Report of the Trustees of the Museum of Comparative Zoology at Harvard College. Boston, 1877, 8vo. *The Museum.*
- CHRISTIANA. Maerker efter en Iistid. I. Omegnen af Hardangerfjorden af S. A. Sexe. 1866, 4to. *From the Royal Norwegian University of Christiana.*
- Le Glacier de Boium en Juillet, 1868, par S. A. Sexe. 1869, 4to. *Ibid.*
- Om *Siphonodentalium vitreum*, en ny slaegt og Art af Dentalidernes Familie, af Dr Michael Sars, pro. 1861, 4to. *Ibid.*
- Index Scholarum in Universitate Regia Fredericana, 1869. 1869, 4to. *Ibid.*
- Om Vegetationsforholdene ved Sognefjorden af A. Blytt. 1869, 8vo. *Ibid.*
- Det Kongelige Norske Frederiks Universitets Aarsberetning for Aaret, 1868. 1869, 8vo. *Ibid.*
- Undersøgelser over Christianfjordens Dybvands fauna (1868) af G. O. Sars. 1869, 8vo. *Ibid.*
- Forsatte Bemærkninger over der dyriske Lios Udbredning i Havets Dybden, af M. Sars. 1868, 8vo. *Ibid.*

* An undelivered packet of Publications from Norway, and another from the Smithsonian Institution, of dates 1868-9 and 1853-9, have this year been received for the Club, and are here acknowledged

- CHRISTIANA. Norges Fugle og deres geographiske Udbredelse i Landet af Robert Collett. 1868, 8vo. *Ibid.*
- Om individuelle Variationer hos Roehrvallerne og de deraf betingede Uligheder i den ydre og indre Bygning af G. Sars. 1868, 8vo. *Ibid.*
- CROYDON. Reports of the Proceedings of the Croydon Microscopical Club. 1871-1878, 8vo. *The Club.*
- DES MOINES, IOWA, U.S.A. Hall (J.) and Whitney (J. D.) Report on the Geological Survey of the State of Iowa, during 1855, 56, and 57. Vol. i., Part i. Geology.—Vol. i., Part ii. Palæontology. 1858, 4to.
Presented by the Governor of the State of Iowa.
- EDINBURGH. Transactions and Proceedings of the Botanical Society, Vol. xiii., Part i. 1877, 8vo. *The Society.*
- ESSEX, SALEM, MASS., U.S.A. Bulletin of the Essex Institute. Vol. viii. 1876, 8vo. *The Institute.*
- GLASGOW. Proceedings of the Philosophical Society of Glasgow. Vol. x., No. 2. 1876-77. 8vo. *The Society.*
- Proceedings of the Natural History Society of Glasgow. Vol. iii., Part ii. 1877, 8vo. *The Society.*
- Transactions of the Glasgow Society of Field Naturalists, Part v. 1877-8, 8vo. *The Society.*
- HAWICK. Transactions of the Hawick Archæological Society. 1877, 4to. *The Society.*
- LEEDS. Annual Report of the Leeds Philosophical and Literary Society. 1876-77, 8vo. *The Society.*
- The Seventh Annual Report of the Leeds Naturalists' Club and Scientific Association. 1877, 8vo. *The Association.*
- LITTLE ROCK, ARKANSAS, U.S.A. First Report of a Geological Reconnaissance of the Northern Counties of Arkansas, in 1857-58. By David Dale Owen. 1858, 8vo.
From the State of Arkansas.
- LIVERPOOL. Proceedings of the Literary and Philosophical Society of Liverpool, 1876-77. Vol. xxxi. London, 1877, 8vo. *The Society.*
- LONDON. Proceedings of the Geological Association, Vol. v. Nos. 2, 3, 4, 5, 6.—1877-8, 8vo. *The Association.*
- Annual Report of ditto for 1877. 1878, 8vo. *Ibid.*
- Journal of the Anthropological Institute of Great Britain and Ireland, vol. iii. Nos. 1, 2, 3, Aug. 1877 to Feb. 1878. *The Institute.*

NEWCASTLE. Natural History Transactions of Northumberland and Durham, Vol. vii., Part i. 1878, 8vo.

The Tyneside Naturalists' Field Club.

PHILADELPHIA, U.S.A. Bibliographia Librorum Entomologorum in America-boreali editorum. Auctore Guil. Sharswood. 1858, 8vo. *The Author.*

PLYMOUTH. Annual Report and Transactions of the Plymouth Institution and Devon and Cornwall Natural History Society, Vol. vi., Part i. 1877, 8vo. *The Institution.*

WASHINGTON, U.S.A. Annual Report of the Board of Regents of the Smithsonian Institution for 1857. 1858, 8vo.

From the Smithsonian Institution.

———— Ditto for 1858. 1859, 8vo. *Ibid.*

———— Ditto for 1876. 1877, 8vo. *Ibid.*

The following Publications of the United States Geological and Geographical Survey of the Territories have been received from Dr F. Von Hayden, State Geologist, through the Smithsonian Institution, Washington.

Miscellaneous Publications, Nos. 1, 2, 5, 6, 8, 9. 1873-77, 8vo.

Bulletins of the U.S. Geological and Geographical Survey of the Territories. Second Series, vol i., Nos. 1, 3, 5, 6; vol. ii., Nos. 2, 3, 4; vol. iii., Nos. 1, 2, 3, 4; vol. iv., No. 1. 1874-1878, 8vo.

Sketch of the Origin and Progress of the U. S. Geological and Geographical Survey of the Territories. By Dr F. V. Hayden, 1877, 8vo.

Preliminary Report of the U.S. Geological Survey for 1871 and 1877. 8vo.

First, Second, Third, Ninth, and Supplement to the Fifth Annual Reports of the U. S. Survey of the Territories. 1873-77, 8vo.

Bulletin of the U. S. Entomological Commission, Nos. 1 and 2.

Natural History of the Rocky Mountain Locust. 1877, 8vo.

Report of the U. S. Geological Survey of the Territories. Vol. i.

Fossil Vertebrates, Part i. Contributions to the Extinct Vertebrate Fauna of the Western Territories. By Prof. Joseph Leidy. 1873, 4to.

———— Vol. v. Zoology and Botany. Synopsis of the Acrididæ of North America. By Cyrus Thomas, Ph. D. 1873, 4to.

———— Contributions to the Fossil Flora of the Western Territories. Part ii. The Tertiary Flora, by Leo Lesquereux. 1878, 4to.

Fur-bearing Animals; A Monograph of the North American Mustelidæ, by Capt. Elliott Coues. 1877, 8vo.

Ethnography and Philology of the Hidatsa Indians, by Washington Matthews. 1877, 8vo.

WELSHPOOL. Collections, Historical and Archæological, relating to Montgomeryshire and its Borders. Vol. x. Parts ii. and iii. Vol. xi., Part i. 1877-8. *From the Powysland Club.*

General Statement.

THE INCOME AND EXPENDITURE have been :—

INCOME.			
	£	s.	d.
Balance from last year	19	2	7½
Arrears received	12	12	0
Entrance Fees	18	0	0
Subscriptions.	68	14	0
	<hr/>		
	£118	8	7½
EXPENDITURE.			
Lithographing	12	4	0
Printing	65	8	0
Expenses at Meetings	14	13	2
Postage and Carriage	17	0	9
Berwick Salmon Company	5	10	4
Charter Box and Weighing Machine for the Club	2	9	6
	<hr/>		
	117	5	9
Balance in hand	1	2	10½
	<hr/>		
	£118	8	7½

Places of Meeting for the Year 1878.

Chirnside and Blackadder ..	Wednesday, May 15.
Wooler and Yeavering Bell ..	„ June 26.
Cockburnspath and Oldhamstocks ..	„ July 31.
Christon Bank for Embleton, &c. ..	„ Aug. 28.
Galashiels and Clovenfords ..	„ Sept. 25.
Berwick	„ Oct. 16.

Rain Fall at Glanton Pyke, Northumberland, in 1877,
communicated by FREDK. J. W. COLLINGWOOD, Esq.; *and*
at Lilburn Tower, Northumberland, communicated by
Mr JOHN DEAS.

GLANTON PYKE.				LILBURN TOWER.			
			Inches.				Inches.
January	..	..	4.11'0	January	..	..	3.651
February	..	..	1.65'5	February	..	..	2.500
March	..	..	4.49'5	March	..	..	3.485
April	..	..	4.05'5	April	..	..	3.561
May	..	..	3.32'0	May	..	..	3.708
June	..	..	1.87'0	June	..	..	1.670
July	..	..	4.26'0	July	..	..	2.895
August	..	..	8.52'8	August	..	..	5.844
September	..	..	2.79'0	September	..	..	2.032
October	..	..	4.85'0	October	..	..	4.015
November	..	..	1.75'5	November	..	..	1.745
December	..	..	1.72'5	December	..	..	1.295
Total			43.41'3	Total			36.401

Rain Gauge—Diameter of Funnel,
8in.; height of Receiver above ground,
4ft. 3½in.; above sea level, 517ft.

Rain Gauge—Diameter of Funnel,
10in. square; height of Top above
ground, 6ft.; above sea level, 300ft.

Rain Fall at North Sunderland, Northumberland, in 1877,
communicated by the Rev. F. R. SIMPSON.

				Inches.
January	..	..	..	2.57
February	..	..	..	1.28
March	..	..	..	2.63
April	..	..	..	2.74
May	..	..	..	2.18
June	..	..	..	1.72
July	..	..	..	2.53
*August	..	..	..	6.01
September	..	..	..	1.49
October	..	..	..	3.49
November	..	..	..	2.34
December	..	..	..	2.03
Total				31.01

* Of this over 5 inches fell from the 18th to 31st inclusive.

Rain Gauge—Diameter of Funnel, 8in.; height of Top above ground, 1ft.;
above sea level, 60ft.

LIST OF NEW MEMBERS FOR 1877.

ADMITTED OCTOBER 31, 1877.

James Lumsden, F.Z.S., Arden House, Alexandria, Dumbartonshire.
 James Tait, Eglingham, Alnwick.
 Isaac Bayley Balfour, M.D. Sc. Dr., Edinburgh.
 Robert Mason, 29, West George Street, Glasgow.
 Alexander Rutherford Turnbull, Slitrig Crescent, Hawick.
 George Heriot Stevens, Gullane by Drem, East Lothian.
 Charles Felix McCabe, Thirston House, Felton, Acklington.
 James Aitchison, Alnwick.
 George Hogarth Turnbull, M.D., Kelso.
 John J. Horsley, Alnwick.
 Rev. Charles Green, Embleton, Chathill.
 Thomas Chas. Hindmarsh, Barrister-at-law, 1, Essex Court, Temple, London.
 Rev. R. Hopper Williamson, Whickham, Gateshead.
 Rev. R. F. Proudfoot, Fogo, Dunse.
 Matthew Culley, Jun., Coupland Castle, Wooler.
 W. H. Johnson, Ramrig, Norham.
 Alan Swinton, Swinton House, Dunse.
 G. T. Lebour, F.G.S., Wide Park House, Lintz Green, Newcastle.
 Robert L. Peplow, Commercial Bank, Edinburgh.
 Rev. James A. Sharrock, St. Nicholas' Church, Newcastle.
 Rev. Walker Featherstonhaugh, Edmondbyers, Blackhill, Co. Durham.
 George E. Watson, Alnwick.
 Stuart Macaskie, 4, Brick Court, Temple, London.
 L. Calvert Chrisp, Hawkhill, Alnwick.
 Charles Woods, Holleyn Hall, Wylam.
 George H. Thompson, Alnwick.
 Rev. John Dawson, Mackerston, Kelso.
 Col. Edmund Palmer, R.A., Alnwick.
 William Lang Blaikie, Holydean, St. Boswells.
 Andrew E. Scougal, H.M. Inspector of Schools, Melrose.
 John Broad, Ashby, Melrose.
 John Thomson, Kelso.
 James Denholm, M.D., Dunse.
 Rev. John Donaldson, Alpine Villa, Currie.
 Rev. G. J. Young, St. Boswells.
 Rev. J. Mackenzie Allardyce, D.D., Bowden, St. Boswells.
 C. E. Robertson, M.D., Otterburn, Newcastle.
 William Wilson, Berwick.
 The Right Hon. the Earl of Haddington, Tynninghame House, Prestonkirk.

ERRATA.

- PAGE 229, line 32, *for* Robert R. Embleton, *read* Robert C. Embleton.
- „ 250, last line, *for* sculptues, *read* sculptures.
- „ 264, line 19, *for* adowson *read* advowson.
- „ 266, line 17, *for* Tharlow *read* Thurlow.
- „ 285, line 40, William Comyn was provost of the Culdees of St. Andrews.
—Spotswood's Hist. i., p. 101, last edit.; Keith's Catalogue, &c.,
p. viii. 1st ed.
- „ 285, line 41, *for* 1692, *read* 1292.
- „ 299, lines 5 and 30, *for* port *read* post.
- „ 302, line 13, *for* session *read* Session.
- „ 306, note*, *for* Hetherington, *read* Aiton.
- „ 310, line 25, *for* dignitam, *read* dignatam.
- „ —, line 34, *for* Swinton, *read* Simprin.
- „ 329, line 22, *for* SWIVTONUS *read* SWINTONUS.

PROCEEDINGS
OF THE
BERWICKSHIRE NATURALISTS' CLUB.

Address delivered to the Berwickshire Naturalists' Club, at Berwick, October 16th, 1878. By JOHN HUTTON BALFOUR, A.M., M.D., F.R.S., Sec. R.S.E., F.L.S., Professor of Medicine and Botany in the University of Edinburgh.

GENTLEMEN,

IN taking the chair on the present occasion, I have, in the first place, to thank my fellow-members for the high and undeserved honour, which they have conferred on me in electing me their President for the year. When I accepted office I had hoped to be able regularly to fulfil the duties of it, but alas, my hopes were blasted by an attack of jaundice and ague, which laid me up more or less for many weeks, and quite unfitted me for exertion in walking or driving. Although for many years a member of the Club, I have not been able to attend the meetings regularly; chiefly because many of them are held during the months of May, June, and July, when I am engaged with my lectures on Botany; and as my hours of lecture and demonstration extend from 8 to 10 A.M., I could not join the Club meetings, especially in a distant part of the country, till late in the afternoon. This I did occasionally, and I always enjoyed

the excursions. Moreover, the autumn months, with the exception of October, are Professors' holidays, and are usually occupied with visits to some distant part of the country, or to the continent, for recreation as well as instruction. Last year I spent August and September in Sweden, Denmark, Germany, and Belgium.* My illness this season compelled me most reluctantly to give up my lectures for nearly the whole summer session. The University Court called in the aid of my son, Dr Bayley Balfour, who took charge of the course, and I am happy to say, he did so successfully. By the advice of my medical friends, I was compelled to remain at home during autumn, and was thus condemned to sacrifice my usual autumnal rambles, and more especially to abstain from long and fatiguing walks, and even from much railway and carriage travelling. I can assure you that it caused me much annoyance to forego the pleasure of the Club meetings.

I am specially fond of excursions in the country, and have indulged in them from my earliest days, especially after I began the study of Botany in 1826. I have now walked over a large portion of Scotland with friends and pupils; including, I may say, all Scotland from Cape Wrath to the Mull of Galloway, and I have collected plants during all my rambles. Among the mountains ascended by me for Botanical purposes in Britain, I may mention the following:—Ben Nevis, Ben-na-mac-Dhui, Ben-na-Bourd, Ben Avon, Cairntoul, Cairngorm, Breriach, Lochnagar, Clova mountains, Canlochan mountains, Glassmeal, Ben Lomond, Ben Venue, Ben Voirlich, The Cobbler, Benim, Ben Loy, Schichallion, Ferragon, Ben Wyvis, Ben Lawers, Ben-y-Gloe, Ben Glass, Craigchailleach, Tyndrum Hills, Cam-e-Craig, Ben Ledi, Meal Clach, Meal Ghirdy, Ben More in Sutherlandshire, and Ben More near Killin, Binean, Ben Hope and Ben Foinavan in Sutherland, the Coolin Hills in Sky; the hills of Glenroy, Goatfell in Arran, Hartfell; the Cumberland hills, Helvellyn and Skiddaw; Snowdon in Wales;

* A notice of my trip, in a printed form, will be presented to the Club.

Macgillicuddy's Reeks and Brandon Mountains in Ireland ; and many of the mountains of Switzerland.

I have been accustomed to take Botanical rambles more or less for 50 years, and have never failed in mountain climbing until recently. I fear, however, that you will consider me as a *Laudator temporis acti*, and consider my details as the indication of the approach of old age. The arrestment of my walking trips indicates, no doubt, the approach of the yellow leaf of autumn, and calls for patience and self-denial. I still, however, hope to have quiet walks of moderate extent from time to time. Nothing, I assure you, would give me greater pleasure than to renew my country visits with the members of our Club. I feel a deep interest in our association, not merely on its own merits, but also from the fact of its having been founded by my much loved though now departed friend, Dr Johnston, whose memory I desire to keep ever in remembrance.

The Club is well fitted to call forth our energies in the prosecution of science. It associates us together in the most friendly relations, it brings us in contact with many friends at our social meetings, and unites us by ties of a lasting and pleasing nature. I can assure you that if I am spared to get my strength restored, the first association I would desire to co-operate with is the Berwickshire Naturalists' Club.

Rambles in the country add much to the interest which we take in various departments of Natural History. We see the objects of Nature *in situ*, and with the pursuit of scientific knowledge we combine that healthful and spirit-stirring recreation, which tends materially to aid mental effort. The various phases of character exhibited, the pleasing incidents that diversified the walks, the jokes that passed, and even the very mishaps or annoyances that occurred—all become objects of interest, and unite the members of the party by ties of no ordinary kind. The feelings thus excited are by no means of an evanescent or fleeting nature ; they last during life, and are always recalled by the sight of the specimens which were collected. These, it may

be insignificant, objects, recall many a tale of adventure, and are associated with the delightful recollections of many a friend. It is not a matter of surprise that those who have been associated in a Natural History ramble, who have met in sunshine and in tempest, who have climbed together the mountain summits, or wandered through the shady glens, should have such scenes indelibly impressed on their memory.

In a Botanical point of view, I have often felt that there is something peculiarly attractive in the collection of Alpine plants. The following are some remarks which I have already recorded on this subject. The comparative rarity of these plants, the localities in which they grow, and frequently their beautiful hues, conspire in shedding around them a halo of interest far exceeding that connected with lowland productions. The Alpine Veronica (*V. alpina*) displaying its lovely blue corolla on the verge of dissolving snows; the Forget-me-not of the mountain summit (*Myosotis alpestris*), whose tints far excel those of its namesake of the lowland brooks; the Woodsia (*W. hyperborea*) with its tufted fronds adorning the clefts of the rocks; the Alpine Gentian (*Gentiana nivalis*) concealing its eye of deepest blue in the ledges of the steep crags; the Alpine Astragalus (*A. alpinus*) enlivening the turf with its purple clusters; the Lychnis (*L. alpina*) choosing the stony and dry heath for the evolution of its rosy petals; the Alpine Sowthistle (*Mulgedium alpinum*) raising its hundred stately stalks and azure heads of flowers in spots which try the enthusiasm of the adventurous collector; the pale yellow flowered Oxytropis (*O. campestris*), confining itself to a single British cliff in Clova; the Azalea (*A. procumbens*) forming a carpet of the richest crimson; the Saxifrages (*Saxifraga hypnoides*, *S. aizoides*, and *S. oppositifolia*), with their white, yellow, and pink blossoms, clothing the sides of the streams; the Saussurea (*S. alpina*), and Erigeron (*E. alpinum*) crowning the rocks with their purple and white capitula; the pendant Cinquefoil (*Potentilla alpestris*), blending its yellow flowers with the white

of the Alpine Cerastium (*C. alpinum*), and the bright blue rock-loving Veronica (*V. saxatilis*); the stemless Silene (*S. acaulis*), giving a pink and velvety covering to the decomposing granite; the bright yellow Alpine Hieracium (*H. alpinum*), and other glorious flowers, which look as if their hues had been wrung from evening skies; the tiny mosses with their club-like thecæ, and the crustaceous dry lichens with their spore-bearing apothecia:—all these add a charm to Botanical excursions, imprinting them indelibly on the memory, and associating them with intercourse of the most pleasing nature. What applies to the Botanist may be said of every zealous Naturalist who wanders over hill and dale in the practical prosecution of his science.

In a Review of Sir Joseph Hooker's "British Flora," Dr Trimen makes the following remarks:—"There is an increasing class of Cryptogamic specialists, especially of Mycologists; there is great facility of foreign travel which leads to much attention being paid to exotic plants, which was formerly devoted to our own flora; above all, there is a new school of Botanists rising, to whom the systematic study of British plants is quite uncongenial. In place of the old-fashioned botanising in the field, and the study of ordinal, generic and specific characters and differences, which have hitherto been the grammar of Botany to British students, and formed the foundation of the knowledge of very nearly all the leading Botanists in this country, the young student now substitutes a course of reading about investigations in development, histology or growth, which have been mainly carried out in the laboratories of other countries, and indulges in speculations on evolution and the acquirement of distinctive characters. It is unnecessary to express here my opinion as to the general results of the change. It is probable that in the future it will become still more marked, and the class of 'good British Botanists' of whom Watson, Borrer, Boswell, and Babington may be cited as examples, are scarcely likely to be ever again so strongly and prominently represented as it has

been.”* There is no doubt a great deal of truth in these statements. It is to be hoped, however, that while plant-biology and microscopic structure are assiduously studied, there will still be many among us, who will combine that department of Botany with a thorough knowledge of the plants of Britain.

What I have already said in regard to the pleasures of the practical systematic and itinerant Botanist, may also be applied to the Zoologist, the Geologist, and the Antiquarian, all of whom are combined in our Club. The association of Naturalists at our social meetings of the Club and the interchange of ideas tend to promote union among the members, and show the bearing of different departments of science on each other. Our scientific views are thus enlarged, and the one-ness of science is thus practically shown. Petty jealousies are done away, and kindly co-operation is secured. Each tries to help his neighbour in his researches, and thus to build up Natural Science on a good foundation.

Amidst all our researches in Science let us never forget the Great Creator and Preserver of all, and while we are zealous and active in our earthly calling, let us ever be “fervent in spirit, serving the Lord.”

My absence from the meetings has prevented me from aiding your active and able Secretary, Mr Hardy, in his work. He has put into my hands his Reports of the Excursions, which will now be laid before you. I must ask him to take my place on the present occasion.

Before concluding, I have great pleasure in proposing my friend Dr John Paxton of Norham, as President of the Club for next year.

* *Journal of Botany*, Oct. 1878, p. 307.

Report of the Meetings of the Berwickshire Naturalists' Club for the Year 1878. By JAMES HARDY.

THE last meeting for 1877 was held at Berwick on Wednesday, October 31, 1877. There were present—Dr Charles Douglas, Woodside, Kelso, President; Dr Francis Douglas and Mr James Hardy, Secretaries; Revs. J. F. Bigge, Stamfordham; William Darnell, Bamburgh; Hastings M. Neville, Ford; R. F. Proudfoot, Fogo; R. Hopper Williamson, Whickham; Captain David Milne Home, M.P.; Lieut.-Col. William Crossman, C.M.G.; Captain J. A. Forbes, R.N.; Drs Colville Brown, Berwick; H. Richardson, R.N., Berwick; Messrs J. F. W. Collingwood of Glanton Pyke; Ralph Forster, Castle-hills; Thomas Allan, Horncliff House; Robert G. Bolam, Berwick; W. B. Boyd, Ormiston House; Andrew Brotherston, Kelso; John Clay, Berwick; John Clay, Winfield; William Crawford, Dunse; John Dunlop, Berwick; J. E. Friar, Grindon Ridge; George Muirhead, Paxton; James Nicholson, Murton; James Purves, Berwick; John Scott, Berwick; George Heriot Stevens, Gullane; George H. Thompson, Alnwick; John Thomson, Kelso; Charles Watson, Dunse; William Weatherhead, Berwick; William Willoby, Berwick; Charles M. Wilson, Hawick; James Wood, Galashiels; Matthew Young, Berwick.

This meeting was for the transaction of business; but during the day the Berwick Museum was visited, and the members were welcomed to the house of Mrs Barwell Carter; and Miss Dickinson from Norham had brought her collection of paintings of British plants, which were examined with much interest. The meeting was held at the King's Arms Hotel, at two o'clock. In the absence of the Treasurer, Mr Hardy gave in a statement of the accounts. The Right Hon. the Earl of Haddington and Mr William Wilson, Berwick, were proposed as members. The President then read his retiring address, and named as his successor, Dr John Hutton Balfour, F.R.S., F.L.S., Professor of Medicine and Botany in the University of Edinburgh. Those who had been proposed for membership during the past year, 39 in number, were elected members of the Club.

The Rev. J. F. Bigge, according to notice, made a few remarks in favour of restricting the number of members; but eventually it was resolved, on the suggestion of Dr Francis Douglas, that

an intimation be inserted in the Circular calling the first meeting next year, requesting members to be careful whom they proposed, and to be assured that they intended to work for and favour the interests of the Club ; and this proposal was accordingly acted upon.

The following places were selected to hold meetings at during the year 1878 :—Chirnside and Blackadder, May 15 ; Wooler and Yeavinger Bell, June 26 ; Cockburnspath and Oldhamstocks, July 31 ; Embleton, August 28 ; Galashiels, Clovenfords, &c., September 25 ; Berwick, October 16.

The first meeting for 1878 was held at Chirnside, for Blackadder and Allanbank, on Wednesday, May 15th. There were present—Mr Hardy, Secretary ; Sir Walter Elliot of Wolfelee ; Sheriff Russell, Jedburgh ; Capt. Norman, R.N., Berwick ; Revs. J. F. Bigge, Stamfordham ; Evan Rutter, Spittal ; R. F. Proudfoot, Fogo ; Drs Charles Stuart, Chirnside ; Henry Richardson, R.N., Berwick ; Messrs Thomas Allan, Horncliffe House : Edw. Allen, Alnwick ; W. B. Boyd, Ormiston House ; Thos. Chartres, Ayton ; J. S. Dudgeon, Longnewton Place ; — Fenwick, Spittal ; J. S. Friar, Grindon Ridge ; George Muirhead, Paxton ; James Purves, Berwick ; and Charles Watson, Dunse.

Under the disadvantage of a succession of thunder showers, the Club managed to carry out a considerable part of its programme. After breakfast at Chirnside the way was taken for the paper-mill at Chirnside Bridge. Here the particular processes in paper-making were pointed out, from the sorting of the initial rude material as Nature produced it, till it appeared, after a lengthened circuit of preparatory changes, as an entire web of paper, which was then cut into sizes, folded, and placed in stock. The article employed here, along with a small per-centage of rags, is the Esparto grass, *Stipa tenacissima*. Livy mentions the *Spartum* in his twenty-second book, chapter 20th, when the Romans, under Scipio, having landed from their fleet on the east coast of Hispania, attacked and defeated Hasdrubal, and burned a large quantity of *Spartum*, which he had collected for the naval service of the Carthaginians, to be used as cordage.* Pliny

* Inde jam præda gravis ad Longunticam pervenit classis : ubi vis magna Sparti ad rem nauticam congesta ab Hasdrubale. Quod satis in usum fuit, sublato, ceterum omne incensum est. — Valpy's edition of Livy, vol. iii., p. 1805 ; compared with Ruddiman's.

says it did not come into general use before the Carthaginian war. From its prevalence on the sea-line where Carthagera now stands, that tract was called the Spartarian plain; and Carthago nova itself, Spartaria. There is also a false Esparto, *Lygeum Spartum* of Linnæus, which can, in some cases, form a substitute for the true. What is employed at Chirnside varies considerably in the strength of the fibre, according to the coast of the Mediterranean whence it is exported. The operations carried on here in the manufacture of printing paper are of an extensive character, as much as fifty tons weekly being sent into the market. The paper for printing the *Illustrated London News* is prepared here. Everything is managed in the best possible manner; and order and cleanliness are the rule. The visit terminated with a sight of the operations for recovering the soda employed in bleaching the substances requisite for paper-making, which is accomplished in quantity sufficient to be remunerative, instead of, as formerly, being cast out as refuse to deteriorate the river. There was a former attempt, by one Peter Winter, to carry on a paper manufactory at Chirnside Bridge, which failed in 1821.

The walk then proceeded by the public road towards Craigs' Walls, where a bog, now almost drained away, was pointed out as a locality for the showy Purple Loose-strife; and in a plantation near at hand, at the foot of what had been a large oak, which is now cut over, a patch of Solomon's Seal, first discovered there by Mr John Ferguson, was found; but it is confined to that spot. This is of very suspicious nativity, being an old garden flower, with a creeping root, and tenacious of life, and readily propagated from stray fragments. Birds, even, may have dropped the seeds there. It is cultivated in the borders at Allanbank. After passing Blackadder North Lodge, and proceeding through the grounds, a wooded strip accompanying a circular burn is reached, where the edible Morelle (*Morella esculenta*) was picked up; and pale blue spots of the woodland Forget-me-not (*Myosotis sylvatica*) looked very attractive. Rain prevented the search for wild blossoms. The view of the mansion-house is first obtained here. It stands on a marked eminence or terrace, above a verdant grassy haugh, which is sprinkled, or in part enclosed, with shapely hawthorns, limes, willows, and other trees, some of them not then quickened into

leaf. The house is well screened, is new, capacious, and well built, and looks handsome, both at a distance, and when closely approached. It has a rocky foundation, and partly occupies the site of the old castle of Blackadder. It looks out upon a winding reach of the Blackadder, with the banks well wooded on both sides of a narrow haugh. The trees, a considerable proportion of them being beeches, from the size of their trunks appear to have been planted in recent times, but they rise with clean stems to a most stately height. There is a venerable ash tree near the house, and a goodly sized white poplar in the grounds. There is a rookery both here and in the contiguous grounds of Allanbank. The company were shewn over the gardens and greenhouses; but a downpour of rain prevented them being seen to advantage. At the house there is a conservatory in the form of a Gothic chapel, with the frame-work entirely of cast-iron, which was erected by the late proprietor, Thomas Boswall, Esq., and cost several thousand pounds. It encloses a good variety of exotics, in a very thriving condition. Such erections are not uncommon now, but when first attached to mansions, they attracted the admiration of the entire country-side.

Some fine primrose-covered banks enlivened the walk, and an umbellated variety of the *Primula*, scarcely differing from the Oxlip, was noticed; and after passing the house, in a nook where once stood a gas-house, Cowslips, both purple and yellow, probably raised from seed, had sprung up promiscuously. Here the purple *Orchis* grows in the meadows. In crossing to Allanbank, which stands on a rise at a very short distance from Blackadder House, plots of the wood Forget-me-not again glistened beside the walk. *Viola odorata* abounds on the banks of the Blackadder down to the junction of the river with the Whiteadder. Kingfishers are frequently seen in the same locality.

The policy at Allanbank is well-wooded, and the trees appear to be co-eval with those at Blackadder. The most patriarchal tree is an ash, now reduced to a stump, crowned with ivy. There is also a white poplar, the rival of that at Blackadder, and a tree called the Bell Tree, whereon the bell of the mansion-house used to be suspended. Allanbank is a compact, well-finished house, mostly new; and is at present unoccupied. The site of the old house is more to the north, adjoining the bowling-green. The

two properties of Blackadder and Allanbank are now combined, and belong at present to Sir George Houstoun Boswall, Bart., and his lady. In early times Allanbank was named East Nisbet, and it was the site of a fortalice. It is also said to have had a chapel, which stood near the spot where the Covenanters convened at the great sacramental assemblage of 1674, although there is no distinct reference to it in the ancient charters.

Near the orchard *Doronicum plantagineum* was observed in some quantity, but its character is that of a garden out-cast. The garden, which contains a good herbaceous border, and the green-houses having been looked at, the walk without further incident was continued by Allanton Bridge to Chirnside. It had been proposed to comprehend Kelloe within the compass of the day's visit, but the delays occasioned by the rain prevented.

At dinner, Dr Charles Stuart, who had acted as leader of the party for the day, presided. A paper, by Mr Hardy, on the history of Blackadder, Allanbank, and Kelloe, was partly read, at an interval during the walk. Dr Stuart exhibited a stone ball found at Billy Castle; but, from its small size, it appeared not to have been a warlike article, but to have been used in the game of "long bullets." Mr Watson brought a copper seal; lately picked up near Marchmont, in Berwickshire, which was of considerable historical interest. The inscription reads:—S. BVRGI. VICI. CANONICORV. MONASTERII. SANCT. CRVCIS—*i.e.* the Seal of the Burgh of the Canons of the Monastery of Holyrood. It is one of the seals of the burgh of the Canongate, Edinburgh. Sir Walter Elliot brought some fossil fish remains, obtained from a quarry of the old red sandstone at Wauchope, near Wolfelee. These were plates of *Pterichthys major*, and were remarkably fine specimens. Others similar, but not so good, have recently been detected in a quarry at Kimmerghame, Berwickshire.

As indications of the progress of the season, Dr Stuart remarked that Sand-martins appeared at Chirnside Bridge, on the 13th April; being five days earlier than in 1877. He saw Chimney-swallows on the 24th April at Edington Mill; and young Grey Wagtails, well on the wing, below Hutton Bridge, on the 26th of that month.

At this meeting two new members were proposed; Mr Peter Loney, Marchmont, and Mr William A. Hunter, banker, Dunse.

The second meeting was held at Wooler, for Yeavinger Bell, on June 26th, and was numerously attended. About thirty-five breakfasted, and over forty dined at the Tankerville Arms Hotel. There were present—Mr Hardy, Secretary; Mr Middlemas, Treasurer; Revs. E. Brown, Alnwick; M. Creighton, Embleton; Adam Davidson, Yetholm; John Dawson, Makerstoun; J. E. Elliot, Whalton; J. S. Green, Wooler; Thomas Leishman, D.D., Linton; Peter McKerron, Kelso; H. M. Neville, Ford; David Paul, Roxburgh; Aislabie Proctor, Doddington; A. G. Taylor, Eglingham; John Walker, Whalton; and G. Woods, Oxford; Drs Dennis Embleton, Newcastle; Alex. Main, Alnwick; Henry Richardson, R.N., Berwick; Captains J. Carr-Ellison, Hedgeley; J. A. Forbes, Berwick; — Forsyth, Berwick; F. M. Norman, Berwick; Messrs Thomas Allan, Horncliffe House; Edward Allen, Alnwick; H. H. Blair, Alnwick; John Bolam, Alnwick; A. Brotherston, Kelso; C. H. Cadogan of Brenckburn Priory; John Clay, Berwick; M. T. Culley of Coupland Castle; M. Culley, jun.; Arthur Evans, Scremerston; J. E. Friar, Grindon Ridge; James Heatley, Alnwick; Robert Hislop, Blairbank, Falkirk; Oskar M. Lindquist, Sweden; Geo. Muirhead, Paxton; W. Richardson, Alnwick; A. Robertson, Alnwick; A. T. Robertson, Berwick; James Robertson, Rock Moor House; John Thomson, Kelso; G. H. Thompson, Alnwick; William Topley, F.G.S., Whittingham.

After breakfast, the main body of the members decided to go towards Yeavinger by the gap that runs in a N.W. direction across the hills, behind Humbleton Hill. This, although attended with rough walking, up-hill work, and steep descents, leads one eventually to the shortest ascent of the hill; and had not the day proved intolerably sultry and close, it might have been comfortably accomplished. Leaving the west-end of Wooler, the walk was along the public road to the High Burnhouse, and then crossed the fields by the foot-path to Humbleton. In a field between the upper and lower turnpikes, belonging to the Tankerville Arms, but bordering on Burnhouse farm, a large sandstone, called "the Whetting Stone," formerly lay, on which the people of Wooler, in the period of Border warfare, sharpened their weapons. It is now incorporated with the fence-wall of the enclosure. The sandstone strata, which are exposed in a section near the burn, have been recently struck near Humbleton Mill,

while the course of one of the supplies of water for the town of Wooler was being rectified. *Geranium lucidum* was pointed out in a corner near the style, where it may have been transplanted from the waterfall above Humbleton Mill; and even there it is doubtfully native.

The higher field above the one crossed by the footpath is called "the Broomy Knowe." When brought into cultivation, by the father of the late tenant, a deep furrow with three horses attached to the plough was held, which brought to light an ancient grave.* Similar interments have been come upon below the exit of the footpath on Humbleton loaning, in the upper corner of the field, that stretches along the loaning to the turnpike. One of the fields, across the lane, is called "the Priest's piece," being an allotment in lieu of certain tithes. On the same side of the lane there is a transverse stony bank, topped by a hedge, which carries brushwood and grass. This is one of "Humbleton Balkses," and was once famous in the domestic economy of the place, owing to the milk of the cows that grazed there, being productive of butter, superior both in quantity and quality. Others of these balks are still preserved, in the open pasture at the base of Humbleton hill. Part of them are natural divisions along lines of rock; others have been dressed or formed by human agency. Another series lay in a transverse direction in the stony field behind the ponds at the eastern end of the hill, but were ploughed up, and levelled in recent times. Before this happened they bore a thick crop of broom. These last are the "Humbleton Banks" of Wallis; about which he, and the other historians of Northumberland have advanced a number of crude theories, one not more plausible than the other.

The only remains of the old cemetery of Humbleton is a gravel knoll, in what is still called the "Chapel Field." The ruinous village stands on an irregular rocky foundation. The village green is occupied by a goose dub in the centre. The buildings that once bordered it are now unsightly broken walls. Many old

* Another is recorded in Mackenzie's "Hist. of Northumberland," vol. ii., p. 385. "At the bottom of the hill, where stands Humbleton Burn House, and close to the burn, the plough in 1811, struck against a large stone. On removing this impediment, a human skeleton was exposed to view, lying in a *kistvaen*, formed of six large flags. The bones were in a high state of preservation, of a close texture, and remarkably large. An urn was found beside the remains."

sanitary herbs flourish beside the ruins; wormwood, mugwort, Good Henry, hemlock, mallows, corn poppies, &c. Another open square faces the east, near what had been a very thick-walled house, constructed for defence, which constituted a farmhouse in the memory of people still alive; and farther on, at the opposite side, are the traces of the fort or peel, now marked by a bush of elder. A very crooked lane forms the communication on this quarter, with the Wooler turnpike. The old houses were constructed very roughly of large porphyritic stones, gathered from the ground, or the adjacent hill-sides; one conspicuous red variety, very prevalent, came from the east side of Humbleheugh, as the hill is locally named. Excepting the Earl of Durham, only three or four freeholders remain; the most considerable owner being called "the laird." It appears from the Northumberland Poll Book that in 1747-8, 10 freeholders voted for Humbleton; in 1774, 6; and in 1826, 7. The farm steadings have been combined and removed to a more commodious situation; work was not to be obtained for labourers or small tradesmen, who were the principal occupants, hence house property was not remunerative; and in the end the larger proprietors swallowed up the lesser. I have been favoured with the sight of the title-deeds of one of these freeholds, of dates May, 1727, and September, 1768, which shews the character of these holdings. It is described as a house or tenement and freehold, situate and built at the east end of Humbleton; and also that headland called Bell's Headland; and all those three butts of land and a small headland, and a little parcel of meadow-ground, which "lie in a field called Margaret's Hole, in Humbleton aforesaid." It belonged then to William M'Dowell, or M'Dougall, of the city of London, tailor, and was occupied by his son, George, a weaver, at an annual quittance of 5 shillings. There is a proviso annexed, which is curious at the present age, that George consented to forego all claims on his father's personal effects, in consideration that his father had freely given him, "one happing and one coverlid, one feather and down ticken bed, two pillows, one bolster, one pair of blankets, one pair linen sheets, and one great chest," as his portion of the family goods.

Leaving this English Auburn, the company crossed the pasture by the road leading to the hill-top, noting the traces of ancient camps, tombs, old earthen walls, and the existing remains of the

balks. The grazings of this hill and its environs are much influenced by droughty years, the soil being thin. The moisture of the present season had been very beneficial, the herbage being very luxuriant. On this dry soil, among the native grasses, grew much of the scented *Galium saxatile*; also *Veronica officinalis*; milkwort, *Polygala vulgaris*, in its pleasant diversity of tints; while Earth-nuts had sprung up in the intervals between the brakens; and shewy fox-gloves in full blossom, greeted us on the ascent. After gaining an elevation, whence was obtained a good view of the town of Wooler, and the plain country encircling it, a direction was taken along the S.W. angle of the hill, for the deep hollow that opens a passage across to the northern side. As we pass along, a pair of partridges and their numerous brood are flushed. Seated on the tops of the brakens, uttering their small alarm, utick! utick! and anxiously shifting their position, a small colony of Whinchats (*Saxicola rubetra*) became conspicuous. These birds occur again at Yeavinger Bell; and I have noted them elsewhere at Lyham edge; on Wooler haugh, at its upper extremity; mid-way up Cheviot, above Langleyford Hope; and at Using Shank, on the way to Broadstruther. They are shy dwellers of remote wilds. The Cushat also is frequently startled from among those close braken thickets, where it resorts to hide, till it can safely steal down into the corn or turnip fields. Pairs of White-throats also breed here among the brakens. The White-throat was again visible near Yeavinger Bell, frequenting some aged thorns, in happy and undisturbed seclusion. Starlings in small flocks of two or three families united were familiarly walking among the sheep. These pastures are also a great resort for Missel thrushes, and to them they lead out their young fledgelings; and Wheat-ears haunted the rocky ground and glitters, wherever we penetrated.

The steep sides of the ravines, now entered, are diversified by brown porphyritic crags, sprinkled at this season with opening heather-bells, a profusion of the gay *Helianthemum vulgare*, and a few fresh fern tufts;—by grassy, or dwarf bilberry verdant stretches, spotted with purple wild thyme, and the yellow stars of tormentil; by purple glitters barren of vegetation;—by outstanding bands of rock of a pillared structure that traverse it like dykes, broken across the centre, and ascending in ridges on either side. The narrow bottom is encumbered with grey

boulders, where a few scrubby blackthorns scarcely maintain a meagre existence; but in whose recesses, where sheltered, the tender *Corydalis claviculata* contrives to subsist. In stormy weather, a strong rush of wind sweeps through this gully. The rock-paved path is only a sheep-track. Near the northern end, the signs of ancient occupancy are unmistakeable, in the ruins of hut-circles, and old folds, and the occurrence of stone-covered oval tombs. All the fern-covered space betwixt this and Standrop, and along the southern base of that hill is clustered with fortlets, and other characteristic remains of the old dwellers among these hills and hollows, now left to the shepherd and his flock. The party keeping on the moor, above the entangling thickets of brakens, move in the direction of the gate in the march fence between Humbleton and Akeld. Several bushes of *Ulex Gallii* were passed here. *Adoxa moschatellina* grows in some of the sheltered hollows of the old hut circles. Harehope camp appeared now close at hand, on the lower eminence in front, between two hills; and the head of Monday cleugh which was now entered, opened up the road to it. Pieces of iron-ore were picked up on the bank below the camp among the soil, which had been disturbed by the burrows of rabbits. The company were glad to rest for a time on the grassy platform, and in a less feverish temperature, than they had hitherto experienced on the march.

Harehope camp lies at the head of Monday cleugh, a deep craggy sided hollow winding round the south-west end of Standrop hill; and to approach it, there has been of old, a narrow depressed carriage track, cleared of boulders, leading up the ravine. The camp was inaccessible to an enemy on this side. The road we had followed as has been said, joined this track at the top of Monday cleugh; and the depression continued in a circular direction, at a higher elevation, so as to isolate the hilly plateau, whose upper portion the camp occupies. This might serve as a moat in winter, for then it holds water; as also during heavy rains. When we visited it, the young shoots of the braken both in it, and other hollows among the hills, had perished by standing too long in such temporary pools. An ancient wall accompanying the ravine, encompasses the base of the camp-hillock; and following it, we encounter the approach from the N.W. to the camp, which is a broad avenue of great

length, bordered on each side by decayed earthen ramparts. The camp or fort itself—a sort of pentagon or square with rounded angles—has strong and thick walls, of accumulated earth and stones; and is still almost entire. The walls may be about 6 feet high or more; there being two on the west and three on the north. There is still a fourth, more remote, on the north, which includes a wide space, containing numerous sheep or cattle folds, and also many large hut circles, set against the back of the third wall. The entrance crosses the walls obliquely, and is protected by an inner guard-house. There are a few hut-circles and other structures in the interior area of the camp; which has not so much been intended for habitation, as to secure the grazing animals of the community, in circumstances of alarm. The long avenue would be useful in keeping them in a body, when driven to it for shelter. There is not much alteration in the camp by later occupants; some cross-walling between the circles may be attributed to shepherds of an age scarce gone by.

This camp, although hidden in a gap, between hill-tops, commands a far prospect, and is an imposing object, ring rising above ring, when looked back upon. It stands in a line with the great camp at the Kettles near Wooler (which, when entire, was a close representation of that on Yeavinger); that on the summit of Humbleton hill; and the extensive walled area surmounting Yeavinger Bell; and the design of all appears to have been alike. There is another large camp, on the east side of Standrop, overlooking Akeld fields.

From Harehope, the remainder of our journey can now be pointed out, the peak of Yeavinger appearing, as it often does from the high ground behind it, like a great walled green field, through an opening behind Akeld hill and Whitelaw, all the bulkier proportions of the hill, as well as the broad intervening ridges and spacious depressions, being levelled over at this deceptive altitude of view. Looking back on Humbleheugh, and forward to the Bell, the walls encircling the summits of the two hills manifestly correspond; and it may be inferred, that Yeavinger in this respect, is not singular from its compeer; and that there is no reason to believe, that the one was a Druid sacrificial station, any more than the other. This was part of the teaching of our journey through the hills.

In some flatter ground to the north of the camp, there are faint

tokens of early cultivation, and the soil appears suitable enough. Here also are a small fort, with a hut-circle in its corner ; two conspicuous tombs ; and several large hut circles. Owing to the rankness of the ferns no more could be seen. Several deep-cut wall-protected British track ways pass obliquely down the hill-sides to Akeld. Standrop hill, it may be mentioned, is a gathering spot in autumn for the hill black-birds or ring-ouzels ; and woodcocks in their autumnal peregrinations, choose it as one of their landing places. At present we hear the songs of the lark and pipit ; the call of the grouse ; the hoarse voice of the carrion crow, and the feeble repetitions of the cuckoo's failing note. Far off, up the glen, the short song of the wheatear breaks the deep silence of the great hill-sides ; an effort harsh but not unpleasant. It mingles with the rush of the little mountain streamlet, heard thus far up, and the voice of the breeze ruffling the fern-clad hollows ; cheering sounds often enjoyed here on other days—which our company would now gladly hail ; but they are silent on this hottest of all days.

The steep descent to Gleedcleugh is through great expanses of dwarf bilberry, now enlivened with the blossoms of the heath-pea (*Lathyrus macrorhizus*). Although there are green strips of bogs entering it, the sides of Gleedcleugh burn are too dry to be productive of rare plants. *Aspidium* *Adiantum-nigrum*, and *A. Trichomanes* grow among its sun-beat, grasshopper-haunted rocks ; and *Polystichum aculeatum* may be found in Akeld wood. The derivation of the name Gleedcleugh, or Gledsleugh, formed a subject of discussion ; the most obvious, that it was *gleed* or crooked, being as likely as one more recondite. Dr Embleton favours me with this bit of learning, not being satisfied with my interpretation. "I recollect the hot walk we had slanting up the side of Gledsleugh, and have often thought of the derivation that it might be possible to find for that name. I suppose now that it is rather from *gled-e* a burning, fire, red-hot coal, *gleed* ; e. g. *gledstede*, a fire-place ; *glede-cleugh*, the fire-cleugh, either from beacon-fire, or fire-worship ; than from *glida*, *glyda*, a glede or kite ; but not unlikely from *glid*, slippery, for its sides in dry weather are certain to be found slippery by any one going straight up, and then you know that, in the valley of the Breamish, we have the "glidders," from *glydering* or *glyderung*, and *glidan*, to glide, slip, slide. This derivation seems to be the most reasonable."

Oppressed by the heat, more than half the company parted from those who determined to go forward, and went down by Akeld to the turnpike. The remainder after refreshing themselves at the burn, started anew, five taking the lead, and three after a pause, following at leisure. Only three of the former reached the hill-top. Those who came last kept at a lower level, and descended by the edge of Whitelaw to the scene of the Club's excavations on the lower part of Yeavinger Bell; and then proceeding to Yeavinger met there a party of members who had come from Yetholm.

The *Viola lutea* was noticed in crossing the moors; as it had been near Harehope. *Myosotis repens* grew beside the cool streams.

The party who had gone round by the turnpike and ascended the Bell, sought in vain for *Pyrola secunda*; but during their search they discovered two nests of the meadow pipit; in one of them was a young cuckoo nearly fledged; and in the other nest a cuckoo egg among those of the rightful owner. The view from the summit of Yeavinger Bell is exceedingly extensive and varied, and though there was a thick haze in the atmosphere, the prospect was certainly pleasing. See Nat. Hist. of the Eastern Borders, pp. 140, 141. Nothing can be added to Mr Tate's account of the hill, in the Club's "Proceedings," vol. iv., p. 431.

It is said that in recent times, the number of trees in the oak wood, on the northern side, have been considerably diminished. A great *hag* in 1802-3, when the large oak timber was conveyed to Berwick, to be employed by the Messrs Gowan in ship-building, thinned them. During snowstorms, the old shepherds on the opposite or Lanton side, were always sure their sheep would not be covered with snow wreaths, so long as "Yeavinger Oaks" were not drifted up out of sight. In some summers they are much defoliated by the caterpillars of *Tortrix viridana*, when all the rooks of the neighbourhood flock to the wood and find something useful to do, for once in their lives.

The meaning of the word Yeavinger has been already attempted to be given in the "Proceedings." Kemble in his "Saxons in England," makes it the "mark" of the Geoforingas. An amusing misconception of the word Yeavinger Bell is to be found in Prior's "Popular Names of British Plants." He mistakes the locality of *Pyrola secunda* in the "Flora of the Eastern

Borders" for its popular name, and his attempt at explanation is a good example of misapplied ingenuity. "Yeaving Bells, Latin *tintinnabulum terræ*," he says, "from the resemblance of its flowers to little bells hung one above the other to be struck with a hammer, as we see in medieval pictures of King David. *Yeaving* is usually spelt *Yethering*, from Scotch *yether*, beat."

I have learned that ancient graves, of which no account has been kept, had in the memory of old people been discovered on Yeaving farm. Mr Riddle, the present tenant, writes that, in ploughing, "there have been thrice taken up what appeared to be old graves. These were roughly built of stone, being about 3 feet by 2 feet, and lying from east to west. One contained about a handful of burned wood, and a very small portion of bone."

Mr Brotherston has supplied me with a note of what he observed on his way to or at the meeting. "*Trollius Europæus* was found in a plantation at the Muirhouse (between Kelso and Yetholm); *Sambucus Ebulus*, *Specularia hybrida*, and *Thlapsi arvensis*, at West Newton. *Specularia* is new to the district. When passing West Newton in October, 1877, I picked up a single specimen on the road-side, and had not time to look for more. When coming to Yeaving, the Rev. Adam Davidson and I examined the weeds in the stackyard, and found plenty of both it and the Penny Cress; the latter was also plentiful in a field near Yetholm Manse. *Hieracium argenteum* was obtained at Heathpool Linn—we did not see *H. crocatum*. *Mentha alopecuroides* still keeps its ground on both sides of the College, a short distance above the Linn. *Orchis incarnata* was plentiful in many of the wet rushy spots, when nearing Yeaving Bell. *Cyllitriche hamulata* grew in pools below the Linn; white fox-gloves, and the oak fern and *Corydalis claviculata* at the Bell. There was a form of *Rosa canina*, which grows in the hedge between West Newton and Heathpool, which I cannot get a name for."

In the field at Yeaving adjoining the strip of wood above the public road, that separates Yeaving from Akeld, when Mr Rea farmed the place, a bog was drained, out of which immense quantities of horses' shoes were dug out, and portions of adipocere, one fragment being "as large as one's head." These were conjectured to be the relics of the stampede after the fight at Humbleton. This planting is haunted by a "White Lady," a

common Northumbrian superstition, which crops up in a great variety of situations. In another field on the same farm, among some stones placed close together, an old buckle was found, drifted over with sand. The bronze vessel already referred to in the Proceedings, which some, not considering the circumstances and place where obtained, have considered as medieval, was disinterred from a peat-moss in a field as one goes to College water.

Among the glitters on the hill face above Akeld, a bronze sword, many years ago, was picked up, lying open to the day. It was purchased by a curiosity-monger. So I was told by one who had seen it.

In draining "Red Rigs," the field on the slope above the public road near Bender, the drainer turned up both human skulls and bones and the bones of horses, for a considerable distance. This is the traditional battle-field of Humbleton. Several of the slain, it has been handed down, were buried in a mound in Mr A. Sanderson's property below Humbleton, which remains undisturbed. It is a popular myth that the little burn which crosses the public road near Bender ran ensanguined, "on Holyrood day," when "gallant Hotspur" "young Harry Percy and brave Archibald, that ever-valiant and approved Scot, at Holmedon met;" the result of that "sad and bloody hour," being that "Earl Douglas was discomfited," and "ten thousand bold Scots, two-and-twenty knights," were "balked in their own blood," "on Holmedon's plains." This battle was fought September 14, 1402.

On the previous day Mr Hislop had visited Chillingham, and from an old tree in the Park dug out *Sinodendron cylindricum*, a beetle that has not hitherto, in Northumberland, been found any farther north than Morpeth.

Mr H. H. Blair brought to the meeting from Alnwick, a branch of Black Currant quite studded over with the brown scales of a species of *Lecanium*. From the cottony substance deposited beneath the covering, thousands of young pink scales afterwards issued, sufficient had they lived to stock a whole garden with the plague. I have not found this species described. Mr Cadogan had with him a small British implement of grey flint, picked up at Howbalk, north of Whittingham. A bullet said to have been picked up on Flodden field was shewn. Col.

Palmer's opinion is that "the shot belonged to a gun called a 'saker' of brass; length 7 feet 11 inches; calibre 3.75; probably cast about 1538." A sword and dagger, reputed relics of the same fatal fight, but as to which there was sufficient reason for scepticism, were also handed round. A number of silver coins, which had been found in an old fishing shield at Lamber-ton Shiels, were brought by Mr Muirhead, from Major Renton. The ages of the coins were from Elizabeth to Charles I.; and there was one of Henry VI. of France. The Rev. J. S. Green exhibited a mammoth tooth from Huntingdonshire.

At this meeting the following gentlemen were nominated for membership:—Mr Thomas Darling, Governor's House, Berwick; Rev. John Walker, Whalton; Rev. A. G. Taylor, Eglington; and Mr Arthur Thew, Alnmouth.

The third meeting was held at Cockburnspath for Oldham-stocks. There were present—the two Secretaries (Dr F. Douglas and Mr Hardy); Revs. J. F. Bigge, Stamfordham; S. A. Fyler, Cornhill; J. S. Green, Wooler; Thos. Roberton, Dunipace, Stirling; G. W. Sprott, North Berwick; J. Walker, Whalton, Newcastle; Geo. P. Wilkinson, Harperley Park, Darlington; E. A. Wilkinson, Tudhoe, Durham; R. H. Williamson, Whickham, Gateshead; Messrs Thomas Chartres, Ayton; Ralph Forster, Castlehills, Berwick; J. E. Friar, Grindon Ridge; John Hood, Oldcambus Townhead; William A. Hunter, Dunse; J. B. Kerr, Kelso; Robert Renton, Fans, Earlstoun; A. E. Scougal, Melrose; J. and George R. Smail, Galashiels; William Stevenson, Dunse; David Watson, Hawick; William Weatherhead, Berwick; William Wilson, Berwick; James Wood, Galashiels.

The day was sultry, but the programme having been purposely contracted, every one present enjoyed the walk comfortably. After breakfast the company set out in the direction of Oldham-stocks, passing through the village of Cockburnspath. A halt was made at the cross, of which the pillar and capital are part of the original structure. There is no inscription, but the royal thistle of Scotland is sculptured on two sides of the capital. One of the first appearances of the thistle as a public Scottish badge was in the reign of James IV., and it figured in the writings of William Dunbar, the poet, in the "Thistle and the Rose," written in 1503, to commemorate emblematically the nuptials of

the Scottish monarch with Margaret, daughter of Henry VII. of England. Consequently the Cockburnspath cross is not earlier than that date, the lordship and lands having been conferred on the young queen as her dowry, and the cross indicated where her markets or fairs for the barony were held. Cockburnspath did not belong, as is sometimes supposed, to the Lords Home, although temporarily they managed the property for the crown. Passing from the Dunbars, Earls of March, by their forfeiture in 1434, Cockburnspath lordship was gifted to Alexander, Duke of Albany, and on his relapse into treasonable practices against his brother, was annexed to the crown in 1487. From his marriage with the dowager Queen Margaret, the Earl of Angus came to hold the lands and castle. They were then bestowed on Stuart, Earl of Bothwell, but he was soon disinherited, and Cockburnspath reverted once more to the crown, from which Sir John Arnot, treasurer depute of Scotland, had a grant of it in "kindly tenandrie" in the reign of James VI. He left it to his second son, William Arnot, who became bankrupt, and was forced to sell the lands of Coldbrandspath and Granton to Mr Thomas Nicolson, advocate, who died in 1625. He had a son, Sir James Nicolson of Cockburnspath, who died in 1690—Sir Thomas Nicolson of Lasswade, being his heir male. Involved in debt, the Nicolsons were compelled to sell Cockburnspath by public roup, and it was purchased in 1694 by the highest creditor, Sir John Hall, the first baronet, of Dunglass; and it still remains with his descendant. Cockburnspath Parish was erected after the Reformation, at the expense of Coldingham, Oldhamstocks, and Abbey St. Bathans. Previously it ranked only as a chapelanrie of Oldhamstocks. In this state of dependency it is old, the chapelanrie and hospital being mentioned in combination. The seal of Master Robert, the chaplain of Colbranspath, is affixed to a charter given at Ayton in 1255. The title of Master belonged to the hospital—a leper hospital, no doubt, it was, where some of the local victims of an incurable and loathsome disease found refuge and support.

In leaving the village several plants, used by the old inhabitants either for food or medicine, were remarked; and the same at Oldhamstocks, such as Wormwood, Mugwort, Good Henry, Hemlock, and the smaller Mallow. The Yellow Toad-flax abounds on the hedge bank near Dovecothall, and again above

Oldhamstocks Bridge. In a field belonging to Hoprig farm, above the tree-sheltered site of Cockburnspath Townhead, a steading now obsolete, a British grave was some years since turned up by the plough.

The party now crossed the gravelly farm of Kirklands, to the upper portion of Dunglass Dean. The Weltered-Thistle is a frequent weed here, not a generally distributed plant; and also the Corn Chamomile. The gravel is also of the same character as that in the channel of the burn between this and above Oldhamstocks, and contains fragments of greenstone, porphyry, and sandstone, as well as the more common constituent, greywacke. On entering the dean the Painted Lady Butterfly appeared. It was general this year (although sometimes absent for long periods), both on the coast and up among the hills. Another entomological feature this season was the absence in the woods of those crowds of summer flies that so persistently annoy visitors, and earwigs were exceptionally scarce. On the other hand, wasps were aggressive and ubiquitous; and the vexatious harvest mites allowed little peace either by day or night to tender-skinned people.

At the Dean Mill cottages, now roofless, at the head of Dunglass Dean, was at one time located a busy colony of weavers; and the mill had its share of country business, and a road of exit and entry, now never used. Robert or "Robbie" White, the grandfather of Robert White, the author of the *Histories of the Battles of Otterburn, Flodden, and Bannockburn*, and not unknown as a Border lyric poet, officiated as "pock-laddie" at Dean Mill. Thence he removed to Belton Dodd, in the Lammermoors, which outlandish place the family farmed, or attempted to farm, for they failed. Finally he crossed the Borders—a man of little pith in fighting the world's battle was the testimony of his descendant.

The steep whinny bank on the south side belongs to Berwickshire—the opposite, on Springfield farm, is in East Lothian. The company crossed the boundary farther on at the issue of Berwick Burn, which here joins the Dean or Oldhamstocks rivulet. Both are narrowly margined with native oaks, hazels, elms, black thorns, willows, and alders. At the entrance of Berwick Burn ravine the handsome Wood Vetch grows. The rock here is the Old Red Sandstone, but the Calciferous

Sandstone is the prevalent rock in Dunglass Dean, a newer formation than the Old Red. There are in it indications of coal, and there are the remains of old diggings for this fuel in the woods; in all likelihood barren of result, the coal measures of East Lothian being higher in the geological scale.

The Water-ouzel (*Cinclus aquaticus*) and the Grey Wagtail (*Motacilla boarula*) haunted the burn. It has been recently stated that the Grey Wagtail is scarce in Berwickshire (Scottish Naturalist, 1878, p. 328), but this is a great mistake. It is, however, to a considerable extent migratory. It makes its transit duly with its white congener across Malta to and from North Africa, in company with other birds of passage. (Adams' Notes on the Nile Valley and Malta). It sojourns in Sussex during the winter, departing for the north in the spring. In the marshes on the opposite side of the burn, grow large beds of *Eupatorium cannabinum*; and *Hypericum humifusum* and the Red Pimpernel, appear in the pastures. Two black-currant bushes have sprung up beside a runnel, nearly opposite Dean Mill.

The first house and holding at Oldhamstocks is called the Crimmels. It has no connection with Oliver Cromwell, although you are told that it has. The village is much scattered, and somewhat in decay. The village green is of small compass. The fair, now defunct, is of little more than two hundred years' antiquity. In 1672, John, Earl of Tweeddale, obtained an Act for two fairs yearly and a market, which were held on this green. The Parish Church, which was visited, is of limited extent. It has lately been renovated. The church probably stands on old lines, but now little remains of early construction, unless it be the ancient window in the aisle on the east. On the gable wall of this aisle there are two coats of arms, the one on the upper half contains the arms of Hepburn of Blackcastle, and the letters T.H.; the lower portion has the ingrailed cross of the Sinclairs, with the initials M.S. The date is 1581. This is believed to belong to Thomas Hepburn, the first Protestant parson or minister, and Margaret Sinclair, his wife. The date is a little discrepant. The second or newer sculptured shield represents on the one side the arms of the Hepburns of Blackcastle, and on the other half those of the Patersons of Bannockburn, the whole surmounted by the Hepburn crest and the motto, "I keep

traist.”* Margaret Paterson was Lady Blackcastle at the beginning of the eighteenth century. The mansion house of Blackcastle stood in a field on the slope north of the church, in which two sycamores grow, which is still the minister’s land. The family is represented by the Belsches of Invermay. Oldhamstocks was of old a rectory, and the patronage was vested in the lord of the manor, who at an early period was Hepburn of Hailes. The rector was a personage of consequence, and the names of several of them are adhibited to charters. Adulph was “presbyter” of Aldehamstoc in 1127, placed dimly on the boundary between the known and the unknown, and at a transition period of churchmen’s titles.

On the corner of the church is a peculiarly shaped dial, with a rude stone gnomon. There is one of similar construction at Cockburnspath, with an iron plate instead of stone, to shadow forth the passing hours; these being out of public view, no one attends to in either case. There are here on several of the aged tombstones many of the grim symbols by which the stone-cutters of the eighteenth century strove to harrow the feelings of survivors by rendering death as unlovely as they could conceive—fat, coarse-featured cherubs, cross bones, skulls, hour glasses, and similar horrors. The occupations of the departed are also attempted to be set forth—the labourer has his pick and spade, the tailor his shears and goose, the joiner the square, axe, and compass, and the weaver his shuttle. There is also a figure in the dress of the period.

After viewing the well-stocked herbaceous borders and flower plots, the members were most hospitably entertained at the manse, and were shewn the old Session Records, and other interesting documents of local importance. Mr Stevenson of Dunse pointed out the geological features of the district during the journey, and consented, at the request of the Club, that his map of this portion of East Lothian, which he has thoroughly studied, should, after revisal, appear in the Club’s “Proceedings.”

* NOTE.—*Arms of Hepburn of Blackcastle.* Gules on a chevron argent, a rose between two lions combatant of the first, in base a buckle in shape of a heart of the second. *Crest*—A horse’s head couped proper garnished gules. *Motto*—“Keep tryst.”—Burke’s General Armory. *Arms of Paterson of Bannockburn.* Argent three pelicans vulned gules; on a chief embattled azure, as many mullets of the field.—Ibid. Nisbet’s Heraldry, i., p. 354.

We were here informed that two years' since a Ring-ouzel had placed its nest in the lower window of the drawing-room of the manse, a few feet from the ground, and one of the eggs is preserved to testify of the fact. I have not met with another instance of this bird mistaking the angle of a window for the recess of a mountain rock. We are also told that the Bluebottle (*Centaurea Cyanus*) still maintains its footing as a field weed near Oldhamstocks; and it has also been observed recently near Innerwick.

On the 21st May, 1817, five children in this vicinity were nearly poisoned by eating some of the root of the "Water Hemlock" (*Ænanthe crocata*). Three of the children belonged to John Paterson, and two to John Dodds, servants to Mr Denholm, tenant of Woollands. They were saved from death through the exertions of Mr John White of the village of Oldhamstocks, who made them drink sweet oil mixed with twice as much milk as oil. White says the eldest of the sufferers "was convulsed to a terrible degree—her mouth turned about to the right side—her lips became black—her eyes distorted, and there was a clanking noise in her throat, something like the beating of a wooden clock; pure blood issued from her mouth, and her body was much swelled." They all vomited after taking White's draught, and in a short time recovered.*

After leaving this quiet place, the members found their way down to the Dunglass woods, through Springfield farm. At a few fields' breadth from the road, a few years since, a close cluster of ancient graves was discovered, when the ground was preparing for crop. The graves were enclosed with grey sandstone slabs, such as are derived from the Pans quarry, on the sea coast near Linkheads. Only black earth remained at the bottom of the cists, some of which, from their size, appeared to belong to young people. This is all that is known of the forgotten cemetery.

Common Agrimony grows at the road-side near Springfield; and an extraordinary quantity of *Malva sylvestris* alongside a wall in a field south from the farm cottages.

The Club has frequently visited Dunglass, and always with pleasure. The trees and ivy, which were rending the building to pieces, have recently been removed from the old church, and a

* Berwick Advertiser, June 28, 1817.

new stone arch has replaced another that had become ruinous, in support of the tower. In crossing the dean the beauty of the festoons of honeysuckle and ivy dependent from the cliffs were subjects of frequent admiration. There are some grand old trees in the woods. As has been remarked once before, the native ferns are almost of tropical luxuriance. The poet Burns declares, in 1787, that Dunglass was "the most romantic, sweet place," he ever saw.

In early times Dunglass belonged to a family named Pepdie or Papedy, retainers of the Earl of Dunbar. The Papedies are almost pre-historic. Papedi, Sheriff of Norham and Islandshire, occurs in 1110. He had no Christian name. Several of them appear in early records; but the name is extinct. Sir Thomas Home of Home, in the reign of Robert III., married Nicholas Papedie, the heiress of Dunglass, and by her obtained that property. These are the ancestors of the present Earl of Home. Dunglass was sold in 1644 in the troublous period of Charles I. to Sir John Ruthven, an officer engaged in the continental wars, and General-Major in 1644, who died in 1649. His spouse, Lady Barbara Lesley, 4th daughter of the first Earl of Leven, the famous General Lesley, is buried in the old church. She died in 1672. Their son, Sir William Ruthven, sold Dunglass to Sir William Sharp, brother of Archbishop Sharp, 1684-5. Sir William Sharp disposed it to Edward Callender, merchant in London, in 1685, who disposed it in favour of Sir John Hall, the first baronet. Sir John had previously, in 1682, acquired the barony of Oldcambus, and for these and all his other lands he obtained a charter in 1687, and an Act of Parliament in 1695.

The following plants may be here recorded as the result of Professor Balfour's periodical visits with students to Dunglass dean and neighbourhood. Several of them are not indigenous, having been either planted for ornament, or being garden outcasts: *Neottia nidus-avis*, *Cardamine amara*, *hirsuta* and *sylvatica*, *Hypericum calycinum*, *Lamium Galeobdolon*, *Berberis vulgaris*, *Geranium Phæum*, *Ribes alpinum*, *Eranthis hyemalis*, *Anchusa sempervirens*, *Viburnum Lantana*, *Carex pendula*, *Melica uniflora*, *Chrysosplenium alternifolium*, *Aquilegia vulgaris*, *Nuphar luteum*, *Anacharis alsinastrium*, *Sparganium ramosum*, *Typha angustifolia*, *Acer campestre*, *Epilobium angustifolium*, *Senecio Sarracenicus*, *Carduus Marianus*, *Mimulus luteus*, *Vinca major* and *minor*, *Equisetum maximum*,

Telmateia, palustre, limosum and *arvense*; *Weissia verticillata*, in fruit; *Alliaria officinalis*, *Veronica montana*. Observations on the luxuriance of the fronds of the ferns and the foliage of other plants were also made:—" *Asplenium Filix-femina*, fronds measured $3\frac{1}{2}$ feet long, *Scolopendrium vulgare* 30 inches long and 3 broad, *Chrysosplenium oppositifolium* 18 inches long, *Allium ursinum* 28 inches long, *Lastræa dilatata* $3\frac{1}{2}$ feet long, *Geranium Robertianum* 25 inches long by 25 across."

Twenty-six assembled for dinner at the inn at Cockburnspath. In the morning the Rev. J. F. Bigge read a notice of a Nightingale's song having been heard in the evenings of the last week in June in a wood close to Blanchland, on the river Derwent, in Northumberland. Mr Bolam of Berwick communicated that a fine specimen of the "Alpine Rose," raised from seed from the Tyrol, is at present in bloom at Carham Hall. Mr Bigge brought specimens of *Calendula arvensis*, field marigold, raised from seed gathered in France; also *Draba incana*, an Alpine plant, and *Cardamine impatiens*, both raised by culture; also a new scarlet *Salvia*, and an Everlasting Pea of a peculiar pale red colour. Mr Robert Renton brought two flint scrapers of primitive people, gathered in Channelkirk parish. Mr Hardy laid on the table MSS. relating to the history of Cockburnspath, Oldhamstocks, and Dunglass.

Miss Langlands forwarded for the inspection of the Club some rubbings, taken by her sister in Italy, of figures that resemble, in some respects, the concentric circles of which their father was the first discoverer, at Old Bewick. One of the examples is a spiral of five convolutions, with a short stalk, with a diameter of $6\frac{1}{2}$ inches; another resembling a wheel, has two central concentric rings; 8 spokes or rays radiating from them, like sun-beams, with broadened ends, to an outer concentric ring; of this the diameter is $8\frac{1}{2}$ inches. None of them have a central dot or boss. The rest were similar to these. They are allied to the sculptures in relief on prehistoric rock-temples in Malta, sketched by Capt. Oswald Carr, R.E., and figured in Mr Tate's paper in the "Proceedings," vol. v., p. 168; one of which is also given by Dr Adams, Plate VII., Fig. 3, in his "Nile Valley and Malta," p. 244. They are accompanied by the figure of a bird; and a fan-shaped figure with 6 rays or ribs broadening outwardly, which is 11 inches long, and $6\frac{1}{2}$ inches broad at its widest expanse.

Miss Langlands being at Florence saw these circles at Fiesole, on the capital of a column in an ancient church. The columns originally formed part of a pagan temple ; but about A. D. 1010, they were built into the church, and are now in its crypt. The circles are on only one capital.

The fourth meeting was held at Embleton, on August 29th. The weather was all that could be desired. There were present—Dr F. Douglas, Secretary ; Mr Robert Middlemas, Treasurer ; Sir George H. Scott Douglas of Springwood Park, Bart., M.P. ; Revs. M. Creighton, Embleton ; J. E. Elliot, Whalton ; J. A. Sharrock, Newcastle ; and John Walker, Whalton ; Dr Wilson, Alnwick ; Messrs Thomas Allan, Horncliffe House ; Charles Anderson, Jedburgh ; C. B. P. Bosanquet, Rock, and Holford Bosanquet ; W. S. Douglas, Springwood Park ; Albert Grey, Howick ; James Heatley, Alnwick ; Thomas Henderson, Middlethird, Gordon ; John James Horsley, Alnwick ; J. B. Kerr, Kelso ; Capt. F. M. Norman, R.N., Berwick ; George Rea, Dodington ; Adam Robertson, Alnwick ; J. Tait, Eglingham ; Geo. H. Thompson, Alnwick ; John Thomson, Kelso ; W. Topley, F.G.S., Alnwick ; William Weatherhead, Berwick ; William Wilson, Berwick.

For notes on the events of the day I am indebted to the report of Mr John Thomson, supplemented by our Secretary, Dr F. Douglas. Fourteen were hospitably entertained at breakfast by the Rev. Mandell Creighton, at the Vicarage, who gave the members a very interesting verbal account of the connection of Merton College, Oxford, with the patronage and tithes of Embleton, which had existed since about the year 1300. Mr Creighton promised to supply the Club, from documents belonging to the College, with the history of its relations with the living. A letter was read from Canon Greenwell regarding the dilapidation of the Tower of Queen Margaret at Dunstanborough Castle, overhanging the sea-cliff, and it was resolved to make application to the Trustees on the estate to execute such repairs as would prevent further injury to the tower.

The parsonage showed many indications of the artistic taste of the vicar—in particular a small Corinthian vase was much admired ; also some fine old engravings, and an oak bookcase made up of bed-posts of the Jacobæan period, and a very handsome walnut and oak chimney-piece manufactured at Alnwick.

After breakfast the ancient Peel Tower at the Vicarage and the Parish Church were inspected. The latter was built about 1320 in a style which may be termed the Edwardian Gothic. It is in a wonderful state of preservation, though, doubtless, much is due to the restoration made in 1850. About 1867 the chancel was added by Merton College, Oxford. In the porch were a few very ancient sculptured slabs of the fourteenth and fifteenth century. The interior of the sacred building, while bearing the dignified look peculiar to an ancient structure, has many evidences of modern taste and culture. Several stained glass windows have been erected to the memory of members of the chief families of the parish, and memorial slabs stud the walls, including one to Mr Shafto Craster-Craster, captain in the 8th King's Regiment, who died of fever at Kangra, British India, in 1856. The inscription states that a tablet has been placed in the church at Julundur by his brother officers and others who appreciated his character and his many virtues. The Crasters are buried in a vault underneath the family pews, above which are the arms of the family, bearing the mottoes—beneath a raven—"Cum sanctis in cœlo," and surrounded by cherubs—"In cœlo quies." There are also memorial slabs to mark the resting-place of the family of Wood, who now inherit the name and estates of the Crasters. There is also a slab to the memory of George Henry Grey, lieutenant-colonel of the Northumberland Light Infantry Militia and equerry to the Prince of Wales, who died in December, 1874. In the south-western aisle are slabs to the memory of several of the former vicars and their relatives, dating from 1714 downwards. For an account of the church Mr F. R. Wilson's careful and accurate "*Architectural Survey of the Churches in the Archdeaconry of Lindisfarne*" may be referred to, pp. 134-5, with plates.

After a survey of the village, the members went down a lane by Embleton Burn, fringed with willows, willow herb, and sedges, till the stream was crossed by a "rustic bridge," composed of two large monolith stones, which spanned the stream. Afterwards, on right and left, were banks of whin, broom, and brakens, till Dunstan Steads was reached.

The walk to Dunstanborough and along the coast was much too rapid to permit of any minute examination of the botany of the locality, but the following plants were found by Capt. Norman,

and Dr Douglas :—*Rosa spinosissima* and *Geranium sanguineum*, very abundant, *Thalictrum minus*, *Scabiosa columbaria*, *Oenanthe Lachenalii*, and *Silene pratensis*.

Before reaching the ruins of Dunstanborough Castle the "Saddle Rock"—an out-crop of limestone of a remarkably strange shape, which afterwards dips away under the basalt—was examined. The ancient ruins are situated on the basalt, which rises perpendicularly from the sea to the height of over forty feet, and having many fissures filled with metamorphosed shale and sandstone. It is in these patches that the various coloured quartz crystals called Dunstanborough diamonds are found. Near the northern point of the promontory a column of basalt, having probably been of a softer nature, has crumbled away; and, looking down through the basalt into a well-like hole, the sea lashing the stones beneath can be seen. Beneath the basalt is a bed of limestone, which is gradually wasting away, and in many parts it has been hollowed out so as to form an almost continuous cavern. The various geological features of the locality having been duly noted, the ruins were inspected. The castle and its precincts occupied a space of over ten acres, and, standing on a lofty eminence, it was almost inaccessible from the east, north, and west sides, though the ground to the south was more favourable for purposes of attack. The building of the castle was commenced in 1313, and at one time the fortress must have been exceedingly strong, for the ruins show that, aided by the natural features of the site, it would be able to resist a long and severe siege. The principal part of the ruins is the entrance gate-house and keep, with its two great semi-circular towers, which, at the height of about thirty feet, are converted by means of skilful corbelling into square towers, which, when completed, rose to the height of eighty feet from the ground. Close at hand, and connected with the keep, is St. Margaret's tower, which is slowly, though surely, crumbling away. In fact, many stones are falling out of their places, and tumbling into Queen Margaret's cove below. On the west side are the ruins of the Lilburn Tower, which had for some time previous been a prominent object in the landscape. Exhaustive accounts of the old castle are contained in the Rev C. H. Hartshorne's "Feudal and Military Antiquities of Northumberland," London, 1852; and in the late Mr Tate's article in the Club's Proceedings, vol. vi.

Growing on the wall was a great profusion of *Parietaria officinalis*. After a much needed rest, the footpath was taken for Cullernose Point. On the way the little fishing village of Craster was passed. Here the herring-curing establishment of Messrs Cormack & Son was visited, and the boats having had a full complement of this useful fish that morning, the members had a first-rate opportunity of seeing the whole process of curing in its various stages. The boats were all in the little harbour at the time we passed, and many of the fishermen were lying about. We were informed that the people of the village, with few exceptions, bore the names of Archbold, Smailes, and Simpson. From this place it was only a quarter of an hour's walk to Cullernose Point, and it was soon reached. Here it is that the coast section of basalt ends, and the rock rises sheer out of the water to a great height. Here may be seen columnar basalt, sandstone both regularly bedded and in a displaced state, and shale, mixed together in a very peculiar manner. At the end of the coast section, where the basalt stops and the limestone begins, the sea has formed a considerable bay, and here sporting about was a shoal of porpoises, which were clearly seen. On the cliffs a considerable quantity of *Asplenium marinum* was noticed, and several specimens were secured. The walk was continued along the coast as far as the Howick bathing-house, from which a fine view of the coast from Bamborough to Alnmouth was seen. The surface of the ocean was studded by many vessels, both sailing and steamers, while the fleet of fishing vessels put out to sea at the same time. The herring shoal being close to the shore, the boats did not require to go far out, and there being little wind they were in view for the rest of the day. The members then walked back to Embleton by Craster Tower.

Shortly after four o'clock the company, numbering 21, sat down to dinner in the Hare and Hounds Inn, Embleton.

The chief subject of conversation was the alleged birthplace of John Duns Scotus at Dunstan Steads, and his connection with Merton College, Oxford. The names of William Hurb Sitwell of Barmoor, and of Edward Dornan Hodgson, Barrister at Law, 2, Plowden Buildings, Temple, London, were submitted for membership. After dinner many of the members went back on invitation to the vicarage, and enjoyed a cup of tea before the train time arrived to separate them for their respective destinations.

Two of the vicars of Embleton are noticed by Anthony-a-Wood (*Athenæ Oxonensis*, vol. i., p. 181). 1. William Cox, sometime fellow of Merton College, afterwards vicar of Emildon. 2. William Cox, son of No. 1., M.A., of St. Andrew's University in Scotland. He was a commoner of Merton College, in expectation of preferment from the visitors, to whom he submitted in the year following (1648), and in the same year, in April, being incorporated M.A., was made soon after by the visitors, fellow of "Brasnose College." Afterwards, 1651, being expelled by Dr. Greenwood for misdemeanour, he succeeded his father in the vicarage of Emildon, Oct. 29, 1657, by the presentation of the College. He was a kinsman to Anthony-a-Wood, and died at Embleton or Emildon, May 16, 1672.

Parker, the vicar in the reign of Queen Anne, was a cousin of Steele the Essayist, and contributed to the *Spectator* the letter in No. 474, of date Sept. 3, 1712; which concerns the manners of the period, in the vicinity where he had come to be placed. He was thoroughly dissatisfied with the boisterous civilities of the north country gentlemen, where the topics were dogs and horses, and anecdotes of falls and fractures over five-barred gates, double ditches, and precipices, received in the chase; nor could he relish the boisterous mirth, which the narration of these mishaps occasioned; nor indulge in the deep potations at carousals, where some of the guests measured "their fame and pleasure by the glass." "But the most irksome conversation of all others I have met with in the neighbourhood, has been among two or three of your travellers, who have overlooked men and manners, and have passed through France and Spain, with the same observation that the carriers and stage-coachmen do through Great Britain; that is, their stops and stages have been regulated according to the liquor they have met with in their passage. The entertainment of these fine observers, Shakespeare has described to consist

'In talking of the Alps and Apennines,
The Pyrenean, and the river Po;'

and then concludes with a sigh,

'Now this is worshipful society!'

He is said also to have contributed to the "*Tatler*," and was the author of the celebrated "*Cure for a Scold*:"

“Miss Molly a famed toast, was fair and young,
Had youth and charms, but then she had a tongue;
From morn to night the eternal 'larum rung,
Which often lost those hearts her eyes had won.”*

The fifth meeting was held at Galashiels on September 25th. There were 43 or 44 present, among whom were—the two Secretaries; Sir George H. S. Douglas, M.P.; Sir Walter Elliot, K.C.S.I.; Revs. J. F. Bigge, Stamfordham; J. E. Elliot, Whalton; James Farquharson, Selkirk; Paton J. Gloag, D.D., Galashiels; Douglas Simpson, Whitby; John Walker, Whalton; R. Hopper Williamson, Whickham; Drs Henry S. Anderson, Selkirk; Alexander Dewar, Melrose; Charles Douglas, Kelso; M. J. Turnbull, Coldstream; Capt. Broad, Ashby, Melrose; Adjutant McPherson, Melrose; Messrs Thomas Allan, Horncliffe House; Thomas Arkle, Highlaws; A. H. Borthwick, Ladiesyde Lodge, Melrose; W. L. Blaikie, Halidean; W. B. Boyd, Ormiston House; Andrew Brotherston, Kelso; John Clay, Berwick; F. J. W. Collingwood of Glanton Pyke; William Currie of Linthill; J. T. S. Doughty, Ayton; James Douglas, Springwood Park; John Scott Dudgeon, Longnewton Place; James Greenfield, Reston; William Home, Galashiels; Peter Loney, Marchmont; Charles McCallum, Newcastle; George L. Paulin, Berwick; Robert Renton, Fans; John Russell, Galashiels; James Smail, Galashiels; William Stevenson, Dunse; John Thomson, Kelso; Charles Watson, Dunse; W. Willoby, Berwick; James Wood, Galashiels.

Sir Walter Elliot, who had been representative of the Club at the Meeting of the British Association at Dublin, made a few remarks on Cromlechs; as well as on cup-markings and excised circles on rocks in Ireland, similar to those among the sandstone hills of Northumberland; these having formed a theme of discussion at that congress. Mr James Wood exhibited an iron spear-head, 9 inches long, which had been extracted from a drain near Earlstoun, in April, 1878. He also shewed two Highland charms or amulets, which he had recently obtained in Perthshire. Both are globular, and of one inch in diameter. The one is a natural nodule of agate enclosed in white chalcedony; the other is of green glass rudely cast, with wavy lines of white enamel radiating from a centre at one end; being an example of an

* The source of the story is said to be in Burton's *Anatomy of Melancholy*. See Mrs Piozzi's *Letters to and from Dr Samuel Johnson*, ii., p. 248.

"Adder-stone," the *Ovum anguinum* of Pliny, about which there has been a considerable expenditure of learning. The water in which these were boiled was accounted a sovereign remedy for cattle-sickness; and their possession was also esteemed so lucky, that they were bequeathed by an old lady to a relative, as preferable to a money equivalent. There was also a broad wedge-shaped celt, entirely polished, representing an advanced stage of that sort of implement, of dark green metamorphosed slate, which had been picked up on the battle-field of Monivaird (Moeghavard) where, according to the Register of St. Andrews, Kenneth V., the Grim, an usurper, fell in 1001, in conflict with Malcolm II., the "rex victoriosissimus" of that period. (See Pinkerton's Enquiry, ii., p. 189.) Lesley calls the place Achnabart. (De Rebus Gentis Scot., p. 192). This implement very much resembles the one preserved at Ashiesteel. Mr William Stevenson brought with him a geological map of Berwickshire, which he had completed previous to the Ordnance Survey, the area and bearings of the rock formations being laid down minutely, after much painstaking. Mr Robert Renton had with him an old dagger of a peculiar form, which had been found on the top of one of the Eildon Hills; a hollow smooth concretion in white sandstone, which resembled the impression of a small human foot; and a Death's Head Moth, captured on the banks of the Gala.

The morning was very wet, and till the day cleared up, the interval was utilised in visiting the Mid-Mill of Messrs J. and W. Cochrane, Tweed manufacturers; and the company thus enjoyed the privilege of surveying one of those vast industrial establishments, to which the town of Galashiels owes its growth and prosperity. One characteristic of Galashiels is, that it is very long, and being cramped laterally in a hollow between the hills, rather narrow; but it is now in search of accommodation climbing the heights on either side, and even encroaching on the private demesne of the lord of the manor, part of Gala Park having recently been fued for building purposes. The pillar of the cross is old; and as well as the rest of the structure is of red sandstone. The inscription is: "Erected in 1695, restored in 1867 with a new base, by the Magistrates and Inhabitants with consent of Hugh Scott, Esq., of Gala."

The excursion was in conveyances, and about 11 o'clock the weather having cleared up, the party were soon on their way

towards Clovenfords, Ashiesteel, and Yair, the proposed places of visit for the day. A large greywacke quarry cuts an extensive gap into the side of Buckholm Hill, and there are more excavations of the kind on the opposite side, beyond Torwoodlee. These have supplied the stone materials for most of the buildings in the town; the yellowish-white sandstone for public edifices and villas is brought by rail from Hexham; the red sandstone, which is also largely employed, comes from Belses, in Roxburghshire. The steep hill slopes here, where the soil is sufficiently deep, are carefully cultivated, and being fresh and growthy yield excellent crops of grain and turnips. Great industry is manifested in collecting the loose stones, which are extremely numerous, into heaps, which dot the high fields like battle-cairns. Advantage has also been taken of their prevalence to erect strong and durable stone walls to subdivide the intakes. The surface of these fields is very undulating and uneven.

Buckholm farm-house, a modified peel-tower, now occupied by a farm-servant, was pointed out, with its memories of a "persecuting" laird, and his ghastly dungeon. Sir Walter Scott affirms that the hilly pastures of Buckholm were famed for producing the best ewe milk cheese in the South of Scotland; and Jeanie Deans offered the Duke of Argyle his choice of one of these, or one of her own particular make, "which some folk think as gude as the real Dunlop." (Heart of Mid Lothian.) Buchelm was of old a dairy for Melrose Abbey; by a concession from Richard de Moreville, constable of Scotland, in the time of William the Lion. The cow-house held sixty cows, and this establishment was constructed within the enclosures that had existed there previous to the grant. (Liber de Melros, No. 107). Torwoodlee, a bulky square mansion, in the convenient style of the end of last century, looks out from an elevation—a natural terrace—surrounded by ancestral woods. A glimpse of the old peel-tower of that name, and the family burying-place was caught through openings among the trees, above the road. We had previously passed on the high ground, on our left, the almost effaced site of the fortified house of Blindlee. "Blindlee Birks" are still spoken of, or simply now "The Birks." The lairds of Buckholm and Blindlee were thorns in the sides of their kinsmen, the Pringles of Torwoodlee, who were zealous Covenanters, while their selfish neighbours, with an eye to the increase of

their estates, were adherents of the party in power; but in the revolution of events, these sapless branches were snapped asunder; while the main stem retained a vigorous vitality. Meikle Moss was a source of much anxiety to the undertakers of the Peebles and Innerleithen Railway, which traverses it lengthways; and it even burst with the weight rested upon it, but the gulf was closed by casting in hurdles of tree-branches. *Orchis incarnata* grows in this bog. Here the great bulk of Meikle hill occupies the eye. On the hill-side are several singular depressions, called the "Meikle Pots;" which some attribute to geological causes; but others are inclined to take them for the pit-dwellings of pristine people. From the description of them, the former opinion is the more credible. The late Mr William Kemp, adopting a theory of Agassiz in regard to similar openings on the flanks of the Swiss Alps, called "Creux and Lapiaz," thought they had been worn out by water pouring through fissures in glaciers, while they were slowly pressing onward. Mr Russell of Galashiels, thus describes them: "They are not seen from the road; but viewed from the railway, or the opposite hill-side, they have the appearance of a series of large, isolated, cup-like depressions in the face of the slope. Upon closer inspection, however, this cup-like formation to some extent disappears, and they are found to be so connected one with the other that a cart road runs right through the bottom of them. They are more like cups tilted to one side, the rim nearly on a level with the bottom. They seem to be purely natural formations, the result of a peculiarity in the geological structure of the hill at this place. Two or three parallel ridges of rock run horizontally along the hill-side, and as these are much jointed and broken, the water from above percolates freely through them, constantly carrying with it small portions of the soil, which not being replaced from above, leave in the course of centuries a hollow space. The cup-like shape of these depressions may be accounted for under this theory by a reference to the sand-glass, in which the sand as it runs out is seen to leave a similarly shaped funnel above." Tradition says that in these cavities the persecuted people used to hold conventicles; and one of them sheltered the laird of Torwoodlee for several days, when pursued by the king's troops. Upon the summit of Meikle hill, on the eastern side of a shelf surrounding its rocky crown, lies a huge

boulder of greywacke, "about the size of a large barrel," estimated at 4 tons weight; which from being well rounded, and having a number of cup-like cavities in it, has all the appearance of having been long exposed to the action of waves. It is called "Wallace's Putting stone," and it is fabled that the Scottish patriot cast it here, from Caddon Law, a high hill situated a great way off. "Magill Pots" are mentioned in 1688, and belonged then to Robert Pringle of Blindlee.

Arriving at Clovenford, or Clovenfords, the company were kindly received by Mr William Thomson of the Tweed Vinery, who, in the most obliging manner shewed everything of interest. Having requested some information about the details and capabilities of this establishment, Mr Thomson informs me, that it was started in 1870. "We have used 24,000 feet of 4-inch iron pipes to heat 70,000 feet and upwards of glass. We have 4 vineries each 200 feet long, 24 feet wide, and 16 feet high, and groined roofed; also 1 vinery 145 feet long, 25 feet wide, and 16 feet high, which is likewise groined. We have 4 lean-to vineries, each 200 feet long; besides one 70 feet long. We produce 15,000 lbs. of grapes annually. Of vines we grow about 1,000 rods. The kinds chiefly cultivated are Gross Colmar, Lady Downe, Black Alicante, Muscat of Alexandria, Barbarossa, and Duke of Buccleuch. We have 500 feet run of houses for supply of plants and cut flowers for our shop in Castle-street, Edinburgh. These we send to town by rail daily." The grapes are chiefly grown for the London market, to meet the early demand in the beginning of the season; and again at Christmas, when fresh well-grown grapes are scarce. In one house was an immense selection of Chrysanthemums. The ferns, orchids, and foliage plants were well grown, and healthy. Unfortunately time was far too limited to see the quarter of the vegetable treasures here accumulated.

In a white-washed house near the road, formerly the inn, Sir Walter Scott used to stay, when called from Edinburgh, to execute the duties that devolved upon him, when first appointed to the shrievalty of Selkirkshire; and he was "an old friend of the house," when on fishing excursions. Professor Wilson also occasionally made it his fishing quarters when out here; but his favourite fishing resorts on the Borders were Innerleithen, Rutherford, and St. Mary's Loch. At this quiet little inn,

Wordsworth and his sister, 18th September, 1803, rested a night, when he would not "turn aside and see the braes of Yarrow;" and to this circumstance we are indebted for those "unspeakably precious possessions," his memorable series of Yarrow poems. A Mr Garnie was then the innkeeper. Miss Wordsworth describes it, as "a single stone house, without a tree near it or to be seen from it. On our mentioning Mr Scott's name, the woman of the house showed us all possible civility, but her slowness was really amusing. I should suppose it is a house little frequented, for there is no appearance of an inn. We dined and drank tea—did not walk out, for there was no temptation; a confined barren prospect from the window."* It is now let as private lodgings by Mr Pringle of Yair, who is the proprietor, to Sir Henry Clavering, who also has Yair fishings taken.

We now experienced the proverbial "Club weather," and the long line of brown hills between Yarrow and Tweed fronting us, had freed themselves of the morning's mists, and stood uncovered in their brightness. Upwards the dun heights of Thornilie and Elibank rose in solitary grandeur, afar off. As we turn down to Ashiesteel, Tweed winding in a narrow green haugh, proceeded from the bosom of the pastoral hills, and passed away downwards towards more fertile lands; its banks overhung with stately timber, clumps of wildwood, or broad plantations; occasionally interrupted by streams of stones, or heathery barren steeps; or expanding into fair meadows and cultured fields, from which looked out family mansions from sheltered sylvan retreats; or the homelier farm-steading with its closely clustered harvest stores; or the lately completed church, and its accompanying school, appearing in the freshness of their masonry, and in their remote situation, like a new settlement far away in an American savannah. Surrounded with these amenities, we almost forget that close behind, scarcely screened from sight, lie the far extending hill-side wastes, where the tempests often rage fiercely, where the winter snow lies long, and the spring frosts bite keenly. Before arriving at the bridge, *Hypericum perforatum* asserts its predominance as a Tweedside plant, by its abundance on the roadside slope. Ashiesteel bridge has a single arch, one of the largest of its period. It broke down in the first attempt made here to span the Tweed.

* Recollections of a Tour in Scotland, pp. 251, 252.

We approach Ashiesteel through the lands of Peel, pertaining to the Duke of Buccleuch. In Sir Walter Scott's time Peel was farmed by Robert Laidlaw, a distant kinsman of the author of "Lucy's Flittin." The Laidlaws were doomed to be all landless men within nine generations; and his weird, despite his parsimonious frugality, at last overtook him. (Lockhart's *Life of Scott*). Robert Laidlaw's only daughter was married in July, 1825, to Dr Nathaniel Paterson, then minister of Galashiels, afterwards of Glasgow, the author of the well-known charming treatise "*The Manse Garden*." In this work he wrote of the Holly in such terms of admiration, both for its utility and beauty, that the nurserymen could not supply the demand which arose when that work made its appearance.*

Ashiesteel is now so closely grown up with trees, as to be almost undiscoverable till it is dropped upon at the end of the avenue. It can no longer look "waste" in the winter and early spring, as Sir Walter used to think. Scott had all a townsman's shivering dread of winter scenes, as Professor Veitch remarks.† A good deal of the wood in Peel wood is natural alder, hazel, oak, mountain ash, and birch; and a portion of the timber at Ashiesteel is also natural. At the lodge a guide, deputed by Miss Russell, the proprietrix, conducted the party by a field road, still called the "Shirra's road," to the "Shirra's knowe," which is on Peel farm. This bell-shaped eminence, apparently a kaim, claims attention, as having once been a favourite seat of Sir Walter Scott. While Mr Laidlaw held Peel, he took special care to keep the turf on the Shirra's knowe in good repair. The trees on the knoll are birches and oaks (*Quercus sessiliflora*); the minor herbage consists of grasses, rockrose *Cistus*, tormentil, dog-violet, primrose, devil's-bit scabious, white lady's bedstraw, heath-pea, and the male speedwell. Parti-coloured fungi spot the sward, and the decaying birches are studded with white *Polypori*. Close beneath, hid amid tangled greenwood is "Glenkinnon's rill;" here shaded with oaks, mountain-ashes, birches, and hazels; but farther up, where it issues from the moorlands, it is embowered in feathery birches. The height before us, brown with heather and fern, is Craighill, or Craig-fell, a pendicle of Yair; that behind, beyond Ashiesteel, with a keel

* Letters to his Family, by N. Patterson, D D., pp. 19, 25.

† Hist. and Poetry of the Scottish Border, p. 511.

like a boat's, is "the Steel;" a *steel* being "the lower part of a ridge projecting from a hill, where the ground declines on each side."

Looking up the wide intervening hollow to the distant ridge, we can mark the place where the road runs that crosses to Minchmoor, by which the scattered remnant of Montrose's routed army fled from Philiphaugh; and where, by the wayside, survives a fragment of the Catrail, on the Brown Knowe, and known by the name of Wallace's Trench. This is the spot where Scott told his young friends, the sons of Mr Pringle of Yair, his tales of "Wallace wight:"

"And pointing to his airy mound
I called his ramparts holy ground;
Kindled their brows to hear me speak;
And I have smiled, to feel my cheek
Despite the difference of our years,
Return again the glow of theirs."

Above Peel, in the Ordnance Map, "Hawthorn" is indicated—possibly the "lonely Thorn," to which there is a special individuality assigned, in the Introduction to the second canto of "Marmion." The Wolf's Glen in William's Hope is the "neighbouring dingle," there alluded to, as bearing the name of the fierce prowler of those wilds in the olden time; a local fact which one might be apt to overlook as the poet's own invention. The North and South Grains of Peel burn run in this hope.

Turning again towards Ashiesteel, we see across the Tweed the slopes of Caddon-lee, sprinkled with stony glitters, and many a wild hawthorn tree; and far up on the open lies a shepherd's dwelling called Trinly Knowes, beneath which old balks of ancient culture were unmistakeable in the sober light. Laidlawsteel was also within prospect.

Trinly Knowes and "Cadounlie" were old Forest-steads; in 1628 the first belonged to Andrew Riddell of Hayning, and the second to George Pringill of Torwodlie. (Inquis. Valorum, p. 14). The prospect cannot be called cheerful, being as Wordsworth says of it—

"More pensive in sunshine
Than others in moonshine."

Passing the lodge, the "Howe Burly," the brawling brook, in the ravine between the lands of Ashiesteel and Peel was crossed. It was this ravine that hemmed the poet's "little garden in."

In the remains of the old vegetable garden in front of the house, now the lawn, there are some hollies now grown to trees ; and also a few large old fruit trees. The aspect of the place is very much altered since Sir Walter Scott's residence here ; and the outline of the house is different ; and the old approaches now disused are overgrown with grass.

The house stands on a bluff about forty feet of elevation above the Tweed. The shape behind is rather peculiar, being as one of our members well remarks, like the letter E without the middle stroke ; the intermediate portion having the hue of most antiquity, while the two projecting wings appear like additions to the original plan. The wing of the house to the east was added by General Sir James Russell, and it must have been an old three-cornered building before. The front is more imposing, and faces to the Tweed ; beneath the armorial bearings over the entrance is the date 1830. "The centre of the house, which is a little higher than the additions," has, Miss Russell remarks, "been made in the seventeenth century out of the original peel-tower, of which the small staircase windows, built up into the stone work, at the back of the house, are still visible when the plaster is removed, on each side of the present window. An early addition, again, is shown by the gable overlooking the stables ; the first wing has been joined on to this, which makes five different dates in the building."

Through the courtesy of Miss Russell, the company was admitted to see the interior of the house, and examine the family portraits and busts, and a variety of antiquities discovered on the estate, or collected elsewhere, which she has preserved. Ashiesteel will be ever memorable, not only as the temporary residence of Sir Walter Scott, but as the seat of a race of gallant warriors, who have won their honours in many a hard-fought struggle in India, and other tropical climes. The following particulars communicated by Miss Russell, about the rooms, it is necessary to give, to correct misapprehension, as some things had been imperfectly pointed out by our guides. "The low square room to the right of the door on entering, now chiefly used as part of the passage, was the old dining-room, and Sir Walter Scott's writing-room. Two of the doors were then windows down to the ground, which his greyhounds used to get in and out at. The small study on the other side of the stone lobby was formerly a

store-room and housekeeper's room; but it shows the thick wall of the original tower—the oldest part of the house, which was there, no doubt, long before my father's ancestor bought the place in Queen Anne's reign. The drawing-room of Sir Walter Scott's time is now a bed-room, at the end of the passage to the left. Beyond the old dining-parlour is the lobby leading to the present drawing-room, in the newer wing."

In the library the company were much attracted towards a low easy-chair, which they were told, was that in which Sir Walter Scott breathed his last at Abbotsford; for which there was no evidence of likelihood, otherwise the pathetic scene, when all his family knelt round the great novelist and poet's dying bed, as depicted by Lockhart, is a romance. Neither was this his study, as others substituting the present for the past, imagined.

In the drawing-room there is a fine view of the river from the window, and it contains the best portrait of General Russell. Of the other curiosities of more special interest to the Club, Miss Russell has favoured us with an account in a succeeding article. Preserved examples of the Osprey and the Goosander found on the estate occur in one of the rooms. The Osprey is less than the average size.

From the house to the river there is a descent by a disused old parish road, that conducts to a ford, where the crossing was, previous to the erection of Ashiesteel bridge. Below the ford was a "Riding Stone," which indicated the depth of the water, to those who wished to pass over. It is now either sanded up, or removed. There is still a boat here to facilitate passage. The object of the visit to the water's edge was to see Sir Walter's oak, which on the under portion is a thick-stemmed stump of a tree, about $11\frac{1}{2}$ feet in circumference, with outspread horizontal lower arms of extraordinary length and stoutness; covering it was calculated about 70 yards. The upward shoot is of disproportionate size to the trunk, but has grown freely; producing branches in their natural positions. It has never been surrounded by other trees, or till latterly, been touched by them at all. It has in fact run to branches, in consequence of not being crowded. It is now one of a crescent of limes, mountain-ashes, and elms, that encircle a small haugh. It was the poet's delight to meditate under its shadow, seated not far from the brink of Tweed's fair waters rushing on. Sir Walter Scott came to

Ashiesteel in 1804, and removed to Abbotsford towards the end of May, 1812. Some of the Introductions to Marmion are the reflex of the impressions made by the Forest scenery on his imagination. A modern fishing-lodge called "The Robin's Nest" stands on the bank-head opposite. It is tenanted by the "Edinburgh Fishing Club."

The company then went to the family burying-place, a square enclosure in the wood, surrounded by stone walls mantled with ivy. On slabs inserted in one of the walls, are inscriptions, containing a compendium of the family history of the Russells of Ashiesteel, who after selling a property in Linlithgowshire, acquired this estate in 1712, from Baillie of Collin.

Lastly, the flower-garden was all too hastily gone through. Its external appearance, Miss Russell states, is almost substantially as it was in Lady Scott's time. It contains many of those old-fashioned border perennials, that threaten to become as rare, in the present rage for shewy colours, as those wild plants, we take such infinite pains to search out among the inaccessible wilds of nature.

After a prolonged stay at Ashiesteel, the vehicles being called into requisition, rapidly took the road downwards by Tweedside. The Caddon burn was in flood, and its clay-stained waters were observed to keep a separate side from those of Tweed, even below Yair bridge. At Caddon-foot is a new church and manse placed on a whinny knoll; and a new school at the wild water foot. This school represents a previous educational resort, built between 40 and 50 years ago. There was one of an earlier date at Caddonlee, where Dr Leyden, the orientalist and poet, at the end of his second session at Edinburgh College (1791-2) acted as assistant. (His recent biography says this was at Clovenfords). When there he was as usual ever keenly eager in pursuit of knowledge. To rouse himself at three o'clock in the morning for study, when here, he invented a sort of clock-work, by which at this hour of summer prime, a cup of water was tilted on to his face. Mr Smail makes me aware of this incident, which was told to him by the late venerable Dr Riddell of Earlston. Dr John Lee, Principal of the University of Edinburgh, a man of great ability, versatile talent, and extensive learning, was, as we learn from Mr Riddell-Carre's "Border Memories," educated at Caddon-lee

school, which he attended during John Leyden's ushership. Dr Lee was born in 1779 at Torwoodlee Mains, in the parish of Stow, where his father was farmer. In a note in the "Minstrelsy of the Scottish Border," we are warned that the "Caddon Ford," in the "ballad of the Outlaw Murray," which King James and five thousand of his men were crossing, awed by the "derke Foreste them before," was "a ford on the Tweed, not the mouth of the Caddon burn near Yair."

A very remarkable discovery of ancient remains of the transition period, betwixt the iron and bronze eras, was made in the beginning of May, 1872, half-way between Clovenfords and Caddon-foot. An account of it was communicated by Mr Alex. Michie to the Hawick Archæological Society, and appears in the Transactions of that year, p. 141. A party of workmen employed in quarrying stones on a hill-side, which is near Caddon Linns, came on a number of articles, including several iron hammers and spear-heads, as well as bronze ornaments. According to Mr Michie, the bronze ornaments, &c., lay undermost, with the iron implements carefully deposited above them, both covered with about a foot and a half of black loamy soil, which again was covered by several large stones imbedded in the turf. There were no external features to mark the spot further than that the spur of the hill on which they were found is thickly strewn with loose boulders. Before Mr Michie reached the place, a rival collector had outstripped him, "saw the workmen, and secured most of the principal relics, consisting of four iron hammers, each of a different construction, and varying in size from twelve inches in length down to three; also four iron spear-heads, besides a number of other articles, use unknown, but to all appearance judging from the portions left these might safely be called pike-heads. In addition to these the workmen secured several of the iron weapons, as also what they took to be a gold broach, but which turned out on examination to be bronze." From the action of rust most of the iron articles fell to pieces when exposed to the air, or were broken by the workmen. Mr Michie recovered several articles, which he deposited in the Hawick Museum. "They consist of two iron hammers, what I take to be a portion of a pike-head, and several pieces of bronze, apparently portions of a bronze broach or buckle," unfortunately broken by the workmen. Several iron and bronze articles still remained in possession

of Mr Hope, the contractor, who carried them off under the impression that they were gold. "They consist of an oval bronze broach, two and a half inches in length, and one and a quarter in breadth. The ornamental portion of the broach has been painted of a blue and red colour, which is distinctly brought out when the surface is wetted. There is also a knife or dagger, the blade of iron five inches long, but part of the point broken off, while the bronze handle, into which it is inserted, is three inches long. There are also several pieces of thin bronze plate, which are rivetted together with bronze rivets, such as one might imagine defensive armour or plates for covering a shield would be manufactured with. The smallness of the handle belonging to the dagger corresponds in size to the handles of mostly all the bronze swords preserved in collections." There are the remains of a very strong British encampment, situated about half-a-mile distant from the place where the relics were found. "This work commands a remarkable natural gorge overlooking the valley of the Tweed, and is known as Caddon Cliffs. A portion of the earthen ramparts is still very distinct, and it must undoubtedly have been a place of considerable importance and vast strength when the natural advantages of its position are considered." This camp can be seen from the upper approach at Ashiesteel, on the rising ground of Caddon-lee.

We now pass the base of Neidpath hill, "the Neidpath Fell" of the poet. At first the hill-side is bare, tufted over with furze or scraggy thorns, or specked with heathery patches and clusters of greystones. Then a very steep bank is darkened by a fir plantation, from whose outskirts a line of brambles push out their tangled shoots to the light, and clothe the naked soil. Hawk-weeds that must have gleamed brightly out at openings a month ago, have now spent their summer bravery. The wallrue fern (*Asplenium Ruta-muraria*) grows here on the lime-cast wall; and *Peplis portula* in the meadow on the other side of the road. The wood on the opposite side of the Tweed, at the base of the Craighill, presents handsome-shaped and well-foliaged trees. A kestrel stole out from their covert, skimmed along their margin, and then became hidden from view. It was the only bird noted on the journey. The swallows had withdrawn from this upper district, although they lingered about Kelso and on the sea-coast a few days longer; Sept. 27th and 30th being the respective

dates of departure. They again, however, returned to Kelso before finally bidding adieu.

Many of the party alighted, and walked up the neglected road to Fairnalee; where there is some very fine Scots fir and beech timber. The old mansion and the offices present a melancholy scene of desolation, being quite ruinous. A breach admitted us between the tall dusky walls; the roof of the underground vault is full of dangerous gaps; the division walls are broken down between the narrow rooms; cattle shelter themselves from the heat or the storms, in what may have been tapestried apartments; all lies open to the sky; dirt and decay are apparent everywhere. The recess at the top of the turret at the S.W. end, where there is a window whence Tweed's varying moods and the opposite line of heather-hills were under the immediate observation of the occupant, marks the room in which Miss Alison Rutherford, afterwards Mrs Cockburn, then a charming young beauty, composed her version of the "Flowers of the Forest." She was born in 1712; married in 1731; and died in 1791. A few verses of the song were sung on the floor beneath, in memory of the fair songstress. The house, about three storeys high, is a lengthy oblong structure; the coat of arms above the main entrance, and all the front is densely overgrown with ivy. A peep behind the leafy screen would have revealed the family by whom it was built; for it had at least two sets of owners (of different branches of the Kerrs) previous to its possession by the Rutherfords. Two fine yews were noticed outside. There are terraces on the slope in front of the house, that lead to a curling pond, built with stone, which was used a century ago. The orchard only contains a few old fruit trees, and there is no longer any gay garden; for here it is sadly true that "the Flowers of the Forest are a' wede away."

Mr Robert Renton sends me, from personal observation, some notes on the place. "The vault," he says, "which you saw on the left hand as you go up the stair is generally thought to be the place of confinement. Its size is about 8 feet by 13; and it is strongly arched over with stone. There is a small aperture to light it on the back wall, measuring 15 inches by 9, which has an iron bar up the centre. The house is roofed with strong slates, some of them $1\frac{1}{2}$ inches thick. The orchard is 4 acres in size, and contains eleven fruit trees—one pear, five apple, and

two cherry trees—but all got away wild. It is fenced in by a wall 9 feet high; the north wall is still good; but all the rest is nearly down.” There had been ample provision made for fixing bee-houses; the vicinity of heather being favourable to keeping an apiary. He had picked up in that neighbourhood, the under-half of an old hand-mill stone at the back of Calfshaw house; an amber bead on the line of the Catrail which crosses the farm; and a small elliptic brass matrix of a seal, found near the wall of the orchard. Pont’s old map of “The Sherifdome of Etricke Forest,” of date about 1620, places trees both at Fairnalee and Yair, but we do not know the age of the timber that at present environs these mansions. Dr Douglas of Gala-shiels, before 1798, measured at Fairnalee an oak whose circumference at three feet above the ground was about $9\frac{1}{2}$ feet; and another only three or four inches less. One of the trees close to the ground was about 13 feet 9 inches. He reckoned that there were at least 80 feet of excellent timber in the whole tree.* But there was once there—it will be wonderful if it exists now—a tree surpassing all others of bulk or value in human interest. This was an old crooked tree at the back of the house, which was at least known to a third generation, under whose shelter Anne Pringle, Mrs Cockburn’s niece, had, “in the bonnie summer nights,” sat with her cousin, Adam Cockburn, the poetess’s only son, who died unmarried, and for whose sake this lady lived and died unmarried. “Perhaps,” say her recent biographers, “this was the ‘naked oak’ where Alison Rutherford had often met John Aikman, and of which Mrs Cockburn wrote in one of her letters.”†

Before the rest of the company is rejoined, “the Nest,” a resort dear to anglers, comes in view. Of this summer lodge Mr Thos. Tod Stoddart obliges me with a notice, which many will be gratified to see. “The original Nest was on the property of the late Mr Douglas of Adderston—or Alderston. I was on friendly terms with many of the members of the original Club, and have been on more than one occasion, a guest at their annual meetings in the Old Ship Hotel, Edinburgh. Alexander Russel of the *Scotsman*, George Outram of the *Glasgow Herald*, Charles Morton, W.S., late Crown Agent for Scotland; Stewart, author of the

* Agricultural Survey of Selkirkshire, p. 284.

† The Songstresses of Scotland, i., pp. 191, 192.

"Practical Angler," and Forrest, Engraver to the Scottish Art Union, I knew intimately. These, I think, and one or two Edinburgh Baillies were among the founders of the Nest Club." The spirited engraving of this Club, the Water Ouzel, by Simson, embellishes one of Mr Stoddart's later works, "An Angler's Rambles and Rambling Songs," a book grateful to all Borderers.

The river is now crossed to Yair. The bridge here was built about 1764, at least the Act for it was obtained in that year. Yair is a large square bright looking mansion, built about the beginning of the present century, and well sheltered behind with old woods. The bank above the entrance to the stables is almost quite covered with the large radical foliage of *Valeriana pyrenaica*. The green lawn in front, bounded by the Tweed, is finely ornamented with tall wide-spreading trees; conspicuous among them a Norway maple, whose crimson upper foliage, flaming like a meteor, catches the attention a great way off. There is also a spacious Spanish Chestnut, with a far-extending lower arm; and variously adorned in mossy green and yellow, an umbrageous Golden Chestnut. The largest tree on the grounds is an Elm, in front of the house. Its rival, a gigantic Ash, beside the Tweed, of 20 feet circumference, at three feet from the ground, was broken across the bole, by the great gale of Sept. 15, 1878. Dr Douglas, in the work already referred to, mentions the elms and ashes at Yair. One ash, in his time, measured 12 feet 9 inches at the bottom, but was divided into two clefts about a foot above the surface of the ground. Another was 8 feet 2 inches at the height of five feet, and had an upright stem of 12 feet; and the whole tree having considerable shoots and branches, contained about 80 feet of timber. Two elms, at Yair, measured each above 13 feet round at the surface of the ground. "One of them at 6 feet above it, is 11 feet 9 inches, and has a straight trunk of 12 feet; the trunk of the other is 9 feet in length, and its average girth is 10 feet 4 inches; and both together must contain from 260 to 300 feet."* Mr Pringle, the owner, courteously welcomed the company. A small stream, the Yair burn, passes between the house and the garden. On the banks of this to the left of the house, and leading to the garden were plots of *Tritoma uaria*, *Cannabis Indica*, *Ricinus communis*, or Castor Oil plant; Bamboo (*Borassus flabelliformis*); and the Tussac-grass of the

* Agricultural Survey of Selkirkshire, 1792, pp. 284, 285.

Falkland isles; all of them shewing vigorous growth. A small thriving example of the Maiden-hair tree (*Salisburia adiantifolia*), a native of Japan, grew nearer the house. There were some well-grown beeches in the sheltered hollow above the garden. The garden is situated on a slope, and divided by stone walls, which break it into terraces, and sustain fruit trees. There are many fine perennial flowers in the borders. In the upper terrace of the garden there is preserved an old stone, with the date 1661, beneath a pious legend, such as was customary at that period: "*All is vanity, one thing is needful.*" This was brought from Whytbank Tower, when it was dismantled to furnish sandstone for the requirements of the present mansion. There is a British camp within the circuit of the adjoining grounds.

The road now climbs obliquely over the hill-side towards the Rink farm, and lifts us above the dark line of plantations that have hitherto interposed between us, and "the sister heights of Yair," which now rise up brown and bulky, with Linglee hill supporting them at the one end, and Fowlshiels hill standing behind them at the other. The Rink camp, on the Catrail, is preserved by a fir plantation at no great distance on our left. Langrink is the name of the lands in 1652, and in subsequent writs; the name perhaps being furnished by the Catrail having acted as a boundary; for Jamieson states that "The Rink" is applied to the line of division, on the Borders between Scotland and England; and the public market annually held a few miles from Jedburgh, is for this reason still called "the Rink fair." There is also a Rink Law in Berwickshire. It may be likewise noted, that *rinck* in Belgic signifies a little circlet or ring;* and may well apply to the separate links of detached camps, of which this supposed ancient frontier in some of its positions principally consists, such as its continuation in the line of forts on the Gala water. It is only quite recently that the name Catrail has been used for convenience as applicable to the Selkirkshire portion. Gordon, who is the only real authority for the whole line, says that in its southward course, "it passes the village of Bredly, in Teviotdale, and crosses the Borthwick water; here it is known by the name of the *Catrail*, but to the northward of this place, it is called the *Picts-work-Ditch*."† In the decret of division of

* Kilianus Auctus, p. 42. Amstelodami, 1642, 8vo.

† Gordon's *Hinerarium Septentrionale*, p. 103. London, 1726. fol.

Selkirk Common in 1681, I notice the word "Pickwork" applied to one portion of the marches, possibly an old wall or ditch attributed traditionally to the same awfully strong, long-armed, and laborious people, whom the present Lowlanders call "Pechs or Piks."*

We again regain the vale of the Tweed after its junction with the Ettrick, a river whose bulk almost equals it. It is remarked that the woods are more tarnished by recent gales, in the wide space that opens around us, as we pass Abbotsford, than among the secluded nooks where we had been sojourning.

After dinner the following were proposed for membership:—Mr William Home, writer, Galashiels; Rev. W. Whyte Smith, Galashiels; Mr John Russell, Galashiels; Mr Thomas Turnbull, Lilliesleaf. Two papers were read at the meeting. 1. On the Catrail, by Mr James Smail. 2. On Howbottom, the hained-ground at Bowhill, by the Rev. James Farquharson.

Mr James Wood gave an account of the discovery, during the present summer, of six ancient slab graves, when the workmen were levelling a hillock called the "Aiken Knock," to prepare for the foundation of new houses, on ground, till recently, included within Gala Park.

The formation of a new approach to the new mansion house of Gala, had also led to the destruction of a venerable elm, long held in superstitious reverence by the natives of Galashiels. This, called the "Round-about Tree," was a reputed resort of the fairies, and other uncanny beings; and one of the few examples left of a trysting tree. It was cut down September 13, 1878.

An hour was spent pleasantly by those who remained behind, at Dr Gloag's manse, where they were shewn his herbarium; his well-stocked collection of ferns, containing numerous varieties of British species; and his minerals and other curiosities.

* Acts Parl. Scot., viii., p. 424. The march ran by a strand to the "well called Kettiethirstwell, and thence goes east the highway that leads to Midlame, till it comes over against the north syd of the Murder-moss, and then stricks over to the north syd moss till it come to the east syd of a *pickwork*, & from thence goes up ane narrow rod upon the east syd of the said *pickwork* straight over to ane other rod that merches Greenhead's propertie from the Common." "An old dyke stead" is recognised as distinct from this *pickwork*.

The Club has to lament the loss by death of the following members:—Mr William Wightman, Wooler; Rev. Robert Home, Swinton; Rev. Dugald Macalister, Stitchell; William M. Mackenzie, M.D., Kelso; Richard Hodgson Huntley of Carham; and Lieut.-Col. Sir James Grant Suttie, Bart., of Balgone and Prestongrange. Mr George Young, Berwick, was inadvertently omitted in last year's obituary list.

The following papers or notices bearing upon the Natural History of the district have appeared during the present or past season:—1. "Notes on the Ferne Islands, and some of the Birds which are found there;" by Mr J. H. Gurney, jun., F.Z.S., in the Proceedings of the Natural History Society of Glasgow, iii. pp. 268-278. Mr Gurney makes remarks on the Cormorant, Puffin, Guillemot, Razorbill, Gannet, Eider Duck, King Duck, Velvet Scoter, Common Gull; the Common, Arctic, Sandwich, and Roseate Terns; Oyster Catcher, Purple Sandpiper, and Turnstone. 2. Mr Peter Cameron on the "Fauna of the West of Scotland;" Hymenoptera; records several Berwickshire Sawflies from my notes or specimens. *Athalia glabricollis*, Thomson, has not been entered in the Club's lists; but is common on Cruciferous plants, notably at the Pease Bridge, on the foliage of *Erysimum Alliaria*. 3. Mr Darcy W. Thompson in the "Scottish Naturalist," is putting to service the Club's recent Ornithological contributions, in a list of the Birds of the South of Scotland. 4. The Rev. O. Pickard-Cambridge in a list of the Spiders of Scotland, reprinted from the "Entomologist" for 1877, records *Erigone conigera*, Cambridge, as occurring in my collection made near Oldcambus, which had been omitted in his List of Berwickshire and Northumberland Spiders, in the "Proceedings" for 1875. 5. The Fourth Report of the Boulder Committee of the Royal Society of Edinburgh, which has now appeared, describes some of the Boulders within our bounds. 6. Our learned co-adjutors, Messrs W. Topley, F.G.S., and G. A. Labour, F.G.S., have communicated to the Quarterly Journal of the Geological Society for May, 1877, a valuable paper "On the Intrusive Character of the Whin Sill of Northumberland."

The veteran contributor to public instruction, Dr William Chambers, has inserted in his Journal, of Nov. 9, 1878, a commendatory notice of the Club, its aims, and its social gatherings, prefatory to an account of the Galashiels meeting. "The

Berwickshire Naturalists' Club," he says, "is more than its name imports. It is an association of gentlemen of varied tastes and acquirements, who are as much concerned in exploring matters of archæological and literary interest in their neighbourhood as in taking note of objects of Natural History. Not confining themselves to discussions and the reading of papers, the members set apart a day for excursions, in which little in the way of scientific or historical inquiry comes amiss to them." "We wish there were more provincial associations of this kind." Thus, in our attempts to penetrate the unexplored country surrounding us, are we encouraged and welcomed to pass onward,

"To fresh fields and pastures new."

Sir Walter Scott's Connection with Ashiesteel, with other Remarks on the Place. By MISS RUSSELL, of Ashiesteel.

IN connection with the late visit of the Berwickshire Naturalists' Club to Ashiesteel, it may be noted that the only part of Sir Walter Scott's published works known with certainty to have been written there, is the part of *Marmion* dated from it. But as the manuscript containing the first eleven chapters of *Waverley*, which had been long laid aside, and turned up during the removal of the furniture from Ashiesteel to Abbotsford, after which it was resumed; and as the second title of that famous work dates it as having been begun in the year after Sir Walter came to live at Ashiesteel, it has always been assumed that these chapters (which struck his friends and advisers unfavourably) were written there.

The house, as tenanted by Sir Walter Scott, consisted of the centre and west wing, which latter had been added by his aunt, Mrs Russell, during her husband's absence in India.

The old flower-garden with box borders, at that end of the house, seems also to have been hers; in fact that side of the house, with the old stables is not much altered.

The house must have been an odd three-cornered building, but if it had consisted only of the centre it is quite impossible

that Sir Walter and Lady Scott could have entertained the class of people they occasionally did at Ashiesteel. The phrase 'farm-house,' which, as used by Sir Walter, would naturally suggest that idea, seems to have had a sort of jocular reference to the sheep farm, which he had in his hands or took some charge of. The house had five outer doors at that time, leading to different additions to the original tower; there are at present five different dates in the building, though fewer doors.

The ground-floor room at the end of the west wing was then the drawing-room; the room over it Lady Scott's bed-room.

The small study was at that time a store-room and house-keeper's room; Sir Walter's writing-room, as in his house in Edinburgh, was the family dining-room; that was then the square parlour now forming part of the passage; before the east wing was built it must have had the same south-east aspect that the present drawing-room and dining-room have.

It had then three windows, those on each side of the fire opening down to the ground; one of these is now a door; the other, now replaced by a press, was that by which Sir Walter's greyhounds were always going in and out. (The two he had at Ashiesteel were named Douglas and Percy).

Sir Walter kept his books in his own dressing-room upstairs; that has since been altered, which has sometimes been regretted; and it is now a small room off what is called the north bed-room. He had the skull from the cave of Eigg, now in the hall at Abbotsford, on the top of his bookcase there.

The great leathern arm chair was a present—in those days a very costly one—from Sir Walter to his cousin, Jane Russell, when she was struck with something that looked like paralysis, after an appalling series of family disasters. She ultimately recovered entirely, under the influence of Italian mineral waters; but the chair was always too large to be comfortable for a woman, and too heavy to be readily moved, even on the large wheels belonging to it.

The chief interest of it is in the keen pity and sympathy which induced Sir Walter to spend nearly fifty pounds in getting the then novelty of a folding-chair from London, as the only thing he could possibly do for his cousin; but it was borrowed for his use during his last illness, at Abbotsford; and when he was able to sit up at all, it was probably in this chair.

There is probably none of the furniture which Sir Walter had at Ashiesteel, and took with him to Abbotsford, in the rooms shown at Abbotsford; as far as it remains, it is probably in the old small rooms. The older part of the furniture now at Ashiesteel had been taken away by the owners, and was subsequently brought back by them.

It seems most probable that Lockhart never was actually at the house at Ashiesteel. It was shut up for many years after Sir Walter gave it up; and as his son-in-law was busy with literary work even when living near Melrose, and must often have passed the place on both sides, it is quite possible he never went up to the closed door.

The evergreen hedges, which he mentions, seem to have had no existence, though the garden was then in front of the house. The large evergreens are much older than his time, and part remains of the barberry hedge planted by Mrs Russell; also a very old spindle-tree. The slipping of the bank of the ravine has carried away many of the barberries.

What is of more importance, he was evidently unaware of the exact position of the house, in the angle formed by two steep banks. His description of a meadow between the house and the river-bank is precisely what would be said by a person who had seen it from the road on the other side of the river. The grassy upper part of the bank has from that point of view exactly the effect of a lawn of some extent.

It is in reality very steep; the situation has no doubt been chosen originally for defence, and the small old tower, now enclosed within the centre of the house, must have been a place of some strength.

The account of the neighbourhood, or rather want of neighbours at Ashiesteel, in the *Life*, there is reason to think conceals a joke, or at least a facetious intention, towards particular families. Making all allowances for the writer not knowing the exact distances, there must have been within a radius of ten miles, besides Bowhill, the existence of which he acknowledges, though it lies in a somewhat different district, and fourteen or fifteen gentlemen's seats, the principal seats of three Scotch peers; two of these peerages, alas! now extinct.

To return to the place. The bridge by which the present approach crosses the ravine was built by Sir James Russell; the old approach is now the walk leading directly to the garden.

The ford has only been quite disused within the last few years; the other one which named the cross-roads Clovenfords, the King's ford below the mouth of the Caddon, has been much longer completely closed.

It is not known at present where Sir Walter found the name of Glenkinnon, which he applies to the valley of the Peel burn, the neighbourhood of which adds so much to the amenity of Ashiesteel, but there is no reason to doubt that he had some authority for it. The rabbits, to which the name probably refers, were, till quite of late years, much reduced, but there were always a few holes in the lower part of the glen.

There are some interesting points about this valley, especially in connection with a heedless assertion of Sir Walter's, in one of his essays on forestry, that till the time of Charles I., Ettrick Forest was covered with wood, except on the tops of the hills.

Not only do Pont's maps, in Bleau's Atlas, which were surveyed in James VI.'s reign, mark the wood in most places very much where it is now; but the name of Penmanscore, that of a small ravine by which a path leads from this valley into that of the Yarrow, is still recognisable as meaning in *Welsh* slightly corrupted, "the head of the great wood;" the wood does not now extend so far up; but this shows that the valley being wooded was already sufficiently remarkable to be a distinction as long ago as the time of the Strathclyde Britons, whenever that was exactly. This name alone goes far to establish the Catrail as being their frontier.

Sir Walter, no doubt, knew as well as any one, when not specially excited about the subject, that the "foresta" of the charters means a tract of ground kept in a wild state, and that in such documents a wood, when mentioned, is *called* a wood, that is by the Latin word, "silva."

The lower ground of Ettrick Forest is, undoubtedly, very favourable for the growth of wood; it is a positive fact, that a gentleman having property in Selkirkshire, and also in another county, was in the habit of receiving a higher price for wood grown on the former, than for similar wood from the other.

The larger plantations at Ashiesteel, those above the haugh, were made by Mrs Russell; they are principally of beech. Some of the larger beeches have latterly been decaying at the heart, which does not seem to happen on the sunny or Yarrow side of the hill.

The spot in the Peel valley where the Knight of Liddesdale was assassinated is still called William's Cross. Below Williamhope Hill, where the open valley ends, is an outstanding knoll or low shoulder facing down the glen, called the Wolf Knowe, or the Bare Knowe; on the western edge of this, over the small ravine called the Wolf's Glen, are, or were, two small heaps of stones; the outer one seems to be a sort of landmark, but the one lying nearer to the main hill is known as William's Cross, and no doubt marks the site of one. It seems doubtful if there can have been really a Wolf's den here; the valley has evidently been inhabited from very early times, besides having roads through it. It may have been the official Wolf-hunter's habitation; other things suggested this as possible.

Of the stuffed birds in the house at Ashiesteel, the young bird of the Eagle kind came to the place wounded, forty or fifty years ago; it only lived a few days. The other birds, except the small ones in the glass case, were all shot in the immediate neighbourhood.

The stone implements in the press in the library were found about ten years ago in a field broken up, many years before, by Sir James Russell. The site of a dwelling must have been come upon; the small find was perfectly typical, containing all the articles most commonly found.

There is a heavy flint axe-head, which has apparently broken away at the hafting before it had been much used or chipped; the outline is rather round, the sides bulging or convex. (It seems now considered nearly certain, on mineralogical grounds, that the flint implements found in Scotland must have been brought from England, either worked or in the rough; the bright-coloured flints of some parts of the Scotch coast have neither the size nor the greenish-grey colour; and some sort of trade or barter seems as wide as the human race).

There are two stone spindle-whorls; these so little indicate remote antiquity if found by themselves, that the ploughmen who found them recognised them as what used to be employed in spinning with the distaff; one is a flat disk, the other convex on one side and ornamented with a circle round the hole. They are of two different kinds of stone both common in the country.

There are several circular baked clay weights, marked by the strings they have been suspended by; these are believed to have

been used in weaving; if so, the web in this case must certainly have been very coarse, as they must each weigh nearly half a pound.

There is a rough stone weighing three or four pounds, with a hole drilled through it, and another hole not carried quite through; there would be nothing very remarkable about this, but for the fact that exactly similar stones are not uncommonly found, at least in England; rough stones pierced with a hole, and having a second hole apparently, but no doubt intentionally, not completed.

December, 1878.

On British Cists found at Galashiels in 1878. By Mr
JAMES WOOD.

ON the 17th June, 1878, I was informed that some workmen whilst engaged in levelling a mound in Gala Park, preparatory to erecting a dwelling-house, had uncovered four large stones standing in a semi-circular form, and apparently erected either to mark the vicinity of graves or of some place notable in the history of the British tribe who once inhabited this locality. Deeming it highly important to watch the progress of the demolition of this mound, I visited the place the following day, and found, as I had anticipated, that the men had come upon an ancient grave, and in a few days afterwards they discovered another, situated immediately below the first. These two cists I examined carefully, and ascertained them to be of corresponding dimensions, viz., 3 feet 8 inches long, 18 inches broad, and 16 inches deep. Their sides were formed of two large slabs, of the whinstone (greywacke) common to the district; the sides closed up by similar stones, and the tops covered by three slabs overlapping each other. These slabs were fitted into their places with great care, and some of them had small stones inserted here and there in order to procure a proper level. The floors of these cists were composed of sand and gravel; they contained no articles of utility or of personal adornment, nor any weapons of the chase, but only a small quantity of dark coloured clay with portions of

bones, which competent judges pronounced to be those of females of about 16 years of age. One jaw-bone was found but there were no skulls in either of the graves.

The four stones already alluded to were discovered not far from the edge of the circle, at a distance of five feet from each other, and entirely covered with earth. They measured from 3 to 4 feet in length, and one, the largest, had been halved to supply a stone to the number; two only were standing upright, the others lay almost prostrate.

The knoll where these stones were found was about 10 feet in height and 30 feet in diameter, and the soil consisted of horizontal layers of earth, loose stones and beds of sand. It used to be a favourite haunt of the boys and girls of Galashiels of sixty years ago, and was known at that time by the name of "The Little Aiken Knock," probably because the trees planted on it were all oaks. In a field adjacent to Gala Park there is a much larger knoll, called at this time "The Aiken Knock," but the trees there are not now, if they ever were, exclusively oaks.

The paucity of ancient British remains hitherto discovered in this neighbourhood has often been matter of surprise to archæologists, as the vicinity of the Catrail, the Rink, and other British Camps, as well as traces of their dwellings near Mossilee Hill point to a large population. We know, however, that these people were in the habit of burying their dead on the surface of the ground, and then heaping over them large quantities of earth and stones, sometimes indeed to an immense size; and as they would find in the numerous moraines of the locality mounds ready to their hand, may they not have availed themselves of these, as they in the present instance have done of a bank or heap of water-drifted sand and gravel?

Fragments of Bone found in the Cists in Gala Park:—

CIST No. I.

1. External condyle and part of trochlear surface of the humerus.

It has belonged to a young person—say about 16 years of age.

2. Left superior portion of the sacrum, bearing the articular surface for the left pelvic bone.

CIST No. II.

1. Left coronoid process of lower jaw.
2. Portion of the shaft of the left humerus. Its small size would seem to indicate that it belonged to a female.

3. Second sacral vertebra.
4. External surface and part of linea aspera of femur, a little above the middle of the shaft. Its small size would seem to indicate that it had belonged to a woman or young person.
5. Part of the posterior surface of the shaft of the femur.

Through the kindness of Dr Cunningham, these fragments were verified at the Anatomical Rooms of the University of Edinburgh, and the list as above presented to me by Dr Sommerville, Galashiels.

On Rottenrow and Rattanraw. By Mr JOHN HILSON.

THE "London Notes and Queries," some years ago, opened its columns to a learned discussion on the origin of this name. There seemed to be no limit to the grotesque ingenuity which the varied host of contributors brought to bear on the solution of the problem. Like all attempts to apply etymology by imagination instead of by some determinate hints of probability or research, the conclusions were many of them absurd. The writer of this note was only able to obtain a line or two of space to state his opinions within the precincts of the somewhat close guild, which the "Notes and Queries" school forms; and he now presents the case a little more amply. First of all it may be noted how completely the most of the contributors have got possessed with the idea that *Rottenrow* or *Rattan raw* has something to do with abbeys, as being a roadway for monks and religious men in olden times. Why, there were *Rattan raws* all over the island before ever a monk set foot upon it—even when Julius Cæsar landed on it. To find what the name implies we must enquire of those who speak the language of which it forms a part. The Gaelic-speaking people are familiar with it—for it means neither more nor less than the Road of the King, *Rathad an Rìgh*, which would be pronounced as near as possible *Rattanraw*, so that this form, and not *Rottenrow*, comes nearest to the proper sound. The Saxon or English synonyme is "the King's Hie Gate," which gives the name to the leading thoroughfares of so many of the towns and burghs of Scotland. Mr Peter

McNaughton of Strath-Tay, an accomplished Gaelic scholar and a translator of Ossian, has been familiar with the use of the name of *Rattanraw* from his childhood. He says that when a boy, engaged along with companions in bringing home peats from the moss, one would have been heard crying if the cart should go by the hill road or by the *Rattanraw*? that is, by the rude mountain path, or by the made road, which, as the work of Government, was regarded as the *Rathid an Rìgh*, or King's Road. So much have the ideas of authority clung to the word that Mr McNaughton says many of the Strath-Tay people designate General Wade's Road as *Rattanraw*. Well then, is it not obvious where the word has had its origin, and how its explanation is to be given? It is to those, as I have said, who speak what is the nearest to the old language of the island that we must go for its meaning, and I think I have shewn what that is. What can we think of correspondents to "Notes and Queries" who suggested that probably the name originated in the road having been laid down with rotten chips, or of another who traced the name to *Rotten*, an old German word for a soldier; or of a Northumberland etymologist, who supplied to Tate's "History of Alnwick" a learned paragraph, making it out to be from *Rotte*, a military muster, or *Rotena*, a road for holiday processions, from *Rot* cheerful, apparently on no other grounds but that certain letters in the one word resembled several in the other! London Guide Books, too, have given a version of explanation by trying to shew that the Westminster Rottenrow is derived from *Route De Roi*. Here they are not so far off with the signification, but why should we beg a classicised name from France, which fails in its component parts, when we have, as described above, the name original to our own country? *Route De Roi* wants the significant letter *n*, which gives the key to the quarter whence the name has been derived. Just as we have instances in Scotland of a similar combination as a name of localities to be found in Edinburgh, Jedburgh, and Kelso, such as Croft 'n Rìgh, the King's Croft; Port an Rìgh, the King's Port or Ferry, in Skye; Tìgh an rìgh, the King's House, in Tullymett, and in Argyleshire at the mouth of Glencoe. London, itself, is often called in Gaelic speech Baile Mor an Rìgh, the King's big town; and Sraid an rìgh is applied to the King's street somewhere in a Scottish northern town.

The mistake the southern antiquarians have made, has been in fancying that the Rattan Raw was peculiar to their end of the island. We will give proofs that the name has had a well recognised purpose all over the island, suggesting the likelihood that it applied to the old pre-Roman routes which must have existed. It has become effaced from recollection in many parts, but it is continually turning up in old deeds and descriptions of boundaries of property. As an interesting relic of the past it could have been wished that in every instance where it had been used in a district it had been put down on the maps of the Sappers and Miners, just as the routes of the old Roman ways have been preserved in these. In addition to its being found in Middlesex, the Rattanraw shews itself in Yorkshire, at Derby, and at Hindley in Lancashire. In Tate's "*History of Alnwick*" mention of it is made as lying near to that town; also as being found at Bamburgh, at Durham, at Langley in the Cheviots, in Tynedale, at Elsdon. It had existed near to Blenkinsop Hall, near Haltwhistle, from an old reference to it in Hodgson's Northumberland. Near Otterbourne Rattenraw is a familiar name. On the side of the Dunian, on Hundalee farm, near to Jedburgh, "the Rattanraw" is an everyday phrase. Then we have it in one of the back streets of Lauder, in Berwickshire, a town of great antiquity with ancient British works in the neighbourhood, bearing names of the same British speech with Rattanraw. Going further north, though not to be found in Edinburgh, we find it prevailed in Leith, where the common vennel was commonly called Ratoun Raw, though forgotten to modern speech there. Then it shews itself as a well-known part near to the High Street, or Hie Gate, of Glasgow. We select one instance in which it is referred to in an old deed where William de Bonkel, Burgess, in 1381 sold certain lands within the Burgh, "*in vico qui vocatur Raton Raw*." Again, it is seen in Dunfermline. In Forfarshire it is to be found in the name of the Rattan raw burn, which flows into the Elliot water; and in Aberdeen it is a familiar name to old residents.

Again we have Rottenrow in the parish of Craigie, in the county of Ayr, and we find it presents itself near to the town of Montrose.

We suspect that the English provincial topographical name of *Royd*, so widely found in Yorkshire, is nothing but the survivor

of the older British *Rathad*, which would be pronounced guttural in the middle letters. In the Gaelic psalms *rathad* often appears as *Rod*, a contracted form, and this may afford the key to the dialectic variations of *Rottenrow* and *Rattenraw* now found over the island.

[For my part, I see no mystery in *Rottenrow* or *Rattenraw*, to occasion any contention, it being a very competent term for a range of primitive rotten or "downcoming" dwellings, composed for the most part of clay, wood, and thatch, and in some instances perhaps adhering to their sites or neighbourhood, when removed, or after a better class of buildings had been substituted. The Shiny Row, the Pitmen's Row, the Back Row, or Raw, are everyday examples; or The Raw, *per se*, e. g. near Rothbury; and the "Raw" of farm-places, where the servants reside; all derived from the A.S. *ræwa*, a series, rank or row. *Rattenraw* in Reedsdale near Elishaw, was, it is well-known, a "Tinklers' Raw." It is a common arrangement in hamlets. "Cocklaw and Keepick," says the Northumbrian rhyme, "stand in a raw." It cannot be doubted that a Highland highway may, as Mr Hilson says, be described by a phrase sounding something like *Rattenraw*; but the instances are not identical; and when was modern Gaelic spoken so extensively either in the Lowlands of Scotland or in England as to give origin to a term so widely distributed as *Rottenrow*? Routes and ways now called *Rottenrows* indicate that they were once lined with decayed structures answerable to the titles. The use of "Raw" for a range of farm-houses, occurs as early as 1428, in a partition of Barislands in Eccles Parish, of which the steading lay "on the north raw" at the west end of the town of Halsington. (Liber de Melros, No. 525.)—J. H.]

Occurrence of the Nightingale in Northumberland. By
the Rev. J. F. BIGGE, Stamfordham.

DURING the very hot weather in the last week in June, 1878, a Nightingale was heard about 8 o'clock for several evenings singing in a wood close to Blanchland, on the river Derwent, in the county of Northumberland. A great number of the inhabitants went out each night to hear it.

Some account of the Plague of Field Mice in the Border Farms, in 1876-7, with Observations on the Genus Arvicola in general. By Sir WALTER ELLIOT, F.R.S., F.L.S., &c.

THE animals forming the fourth order* of the mammalia, although timid and defenceless, "a feeble folk," are nevertheless capable of doing much mischief and of causing serious damage to mankind. Armed with two pair of adze-like incisors they are able to cut through wood, and even the softer metals, and to inflict considerable injury on fields, woods, and gardens. Hence the name of *Glires* proposed by Linnæus for the order (from *glis*, a dormouse), has been changed by later systematists, into that of *Rodents* or *Gnawers*.

Breeding often in the year and producing several young at a birth, they multiply with great rapidity, becoming very destructive where the supply of food is unfailing, as near human habitations or in places where suitable sustenance is abundant. Even where these conditions are less favourable, and their depredations are not so constant, they often prove highly injurious. To say nothing of the damage done by rabbits, hares, squirrels, &c., the North of Europe suffers from migrations of countless swarms of Lemmings, while some parts of our own country are invaded at intervals by swarms of Field-Mice, which, issuing from their usual haunts, disperse themselves over pastures and plantations, and devour everything edible that comes in their way.

These belong to the genus *Arvicola* of Naturalists, three species of which inhabit Great Britain—the Water Rat (*A. amphibius*), the Red or Bank Vole (*A. glareolus*), and the Field Vole (*A. agrestis*).† They are distinguished from the true mice (genus *Mus*) by their stouter body, thicker head, obtuse muzzle, small

* Of Linnæus, Sys. Nat.

† Continental Naturalists call them *Campagnols*, which Dr Fleming altered to *Vole*, a change approved by Macgillivray (Nat. Lib. vii., 260) "although," he observes, "it has no meaning." But it may appropriately be derived from the French *voler*, "to plunder, to rifle, to strip." The name does not occur in the standard English dictionaries (as Johnson, Richardson, Halliwell), but Jamieson gives it as an Orkney name for "the short-tailed mouse," on the authority of Barry's Orkney, and suggests it may be derived from the Saxon *wold*. Baikie and Heddle merely cite the Orkney name as "*Vole*" or "*Vole mouse*." (Nat. Hist. Ork., 1848).

ears, and the tail shorter than the body, whence they are often called short-tailed mice. The molars, or back-teeth, have flat crowns, with transverse ridges of enamel, adapted for grinding the vegetable matter on which they feed, whereas in true mice they are covered with points or tubercles suitable for an omnivorous diet.

It was the last-mentioned, or field vole, that made its presence so conspicuously felt, and caused so much damage to the higher lying sheep-farms along many parts of the Borders, in the winter and spring of 1875-6. They had been observed to be more numerous than usual during the three or four previous seasons, but not to the extent of causing serious inconvenience. In the spring of 1876, however, their numbers became alarming. The districts most seriously affected were the hill farms, on the borders of Roxburghshire, Selkirkshire, and Dumfriesshire, especially those contiguous to the watershed, between Teviotdale, Eskdale, and Liddesdale. Further west the higher portions of Upper Nithsdale suffered seriously, though in a less degree. No complaints were heard from Northumberland, or the sheep-walks to the eastward along the Cheviot range, but in many places they were observed to be more numerous than usual. The same may be said of the Cumberland and Westmoreland sheep-farms, and of those in North Wales, but in parts of the West Riding, as in Wensleydale and Bedale,* they were found to be troublesome. Small communities were met with here and there, in unwonted spots, during the summer and autumn months of 1875-6-7, where the luxuriant pasturage afforded a temporary retreat. But they may be said to be distributed more or less sparingly at all seasons, over the whole island wherever food and cover are suitable, and to occur at all elevations. Dr Buchanan White found traces of them on Ben-na-Mhuic-dhu, at nearly 4,000 feet, and picked up a dead one on another hill, at 2,700 feet, which, from its position, had apparently been brought down from a higher altitude by water.

Their favourite haunts are low-lying moist grass-lands and damp plantations, especially when young. In such spots, and more frequently in the former, they live in communities, forming numerous burrows at no great depth, each pair having their own dwelling, in which they bring up their young, and deposit their

* The Field, vol. xvii., p. 729, and M.S.

store of winter food. The burrows are kept scrupulously clean, their droppings being deposited in little heaps outside. All around, their tortuous runs are seen on or near the surface, showing where they have been foraging. An obliging correspondent has sent the subjoined sketch of one of these places, observed near Auchenbreck, in Dumfriesshire. "Their roads," he states, "as you will perceive, form a net work, and run sometimes a



little below the ground, but generally on the surface, among the upper roots of the grasses. The little dots on the sides of the runs represent small holes, an inch or two long, made solely, I should think, for the purpose of getting food by the way. In this way the grass roots, in many places, have been quite destroyed."

Its diet is principally herbivorous, consisting of roots, young shoots of grass, the tender bark of shrubs, &c. It particularly affects the delicate white stems, rising immediately out of the earth, but in times of scarcity nothing green comes amiss to it. When pressed, it is said to devour insects, and even its own kind.*

Its habits are diurnal, and it may be seen running about all day, but in greater numbers in the evening. Another intelligent and accurate correspondent, describing their ways, says, "it takes a very quick eye to observe them in rough ground, as they run with such rapidity, that they seem to disappear like a streak, as it were; the movement is so quick that there is hardly time to

* Prof. Bell observed it to be partial to insects in captivity,—British Quad 325. Dr Sharp, one of our foremost Scottish Coleopterists, has remarked that where voles are common, beetles are scarce.—M.S.

distinguish the form of the creature." The same gentleman had an opportunity of watching them in more open ground. Passing through Sir F. Johnstone's park, at Westerhall, in Dumfriesshire, in the summer of 1876, he saw great numbers running among the grass near the road. "At one time I stopped to watch them, and it was curious to see how tame and confidential they became, as soon as I stood still. They chased each other back and forward along their runs, and whenever they saw me move, they darted into their holes, one of which they seemed easily to find, they were so numerous. As soon as they thought themselves safe, they wheeled round and stared up in my face, with their beautiful bead-like eyes for a long time, till having made up their minds that I meant them no harm, they again commenced their gambols, without taking further notice of me. I observed then, how greatly they vary in colour, from the brown of a seal-skin jacket to a light fawn." A continental naturalist describes a colony of the species that he surprised in a wood in Switzerland, in somewhat similar terms. "Every instant I saw them flying right and left, towards their holes; some would rush headlong under a root, and thus disappeared for a moment under the herbage and leaves, to emerge further off and nearer their home, trying by these little feints to baffle the pursuit of which they were the object. Often, notwithstanding what Blasius says, I have waited a long time near the opening into which I had seen the animal enter, without its being willing to show itself again. The underwood had been drowned, so to say, by the previous rain, yet these little creatures disported themselves freely through it in open day. In their alarm they did not hesitate to plunge through the marsh, or to precipitate themselves into a hole, half full of water."*

As a general rule the Vole has three or four litters in a year, and produces from four to eight, but usually five or six at a birth. Several farmers and shepherds, however, in the hill districts believe that in mild seasons they are still more prolific, breeding five or six times, and rearing eight or nine young. In proof of this they state that in such abnormal years, the young mice are seen from February to November. Now, as the period

* Victor Fatio : *Les campagnols du Leman*, 1867, p. 18. J. H. Blasius is author of a *Natural History of the Mammalia of Germany*, Brunswick, 1857.

of gestation of the rodents is only from three to six weeks,* and that of the vole is probably among the shortest, there is nothing improbable in the popular idea. And so with regard to the greater number of young produced and brought to maturity, the female being furnished with eight mammæ, and even occasionally more, she may easily rear the larger number under exceptional circumstances.

The interest excited by the swarms of Field Mice that made their appearance in 1876, arose less from the unusual character of the phenomenon than from its bearing on the welfare of the hill sheep, and the profits of the farmer. To persons unacquainted with rural affairs, the connection between the arrival of such puny visitors and the flocks that range the mountain slopes, may not be very apparent. A slight sketch of the habits of the Cheviot sheep will show how disastrous such an invasion might have proved had it not been confined within comparatively narrow limits.

The hardy flocks bred on the higher Border hills retain much of their wild nature, and depend almost wholly on natural instinct in seeking their daily food. The flock or *hirsell* on a large farm forms itself into three, four, or more divisions called *cuts*, each keeping to its own range of pasture, and feeding gradually upwards to its resting place for the night near the top. If a stranger or other unusual object interrupts the even tenor of their way, the first to perceive the intruder stamps with its foot, and utters a sort of hiss, on which the whole *cut* takes the alarm, and runs off, but always keeping upwards.

During the summer months they range over the whole hill side within their limits, cropping the tender shoots of the heather, and browsing on the *moss*, *ling*, *deers-hair*, and other favourite grasses,† on which they thrive and become fat. As winter approaches, and vegetation slackens, the *bents*, and stronger hill grasses become dry and sapless, and the sheep betake themselves to the *laj* or *lea* grasses, which, under the general name of *spret*, flourish on the land lower down. This lea land, perhaps once

* Victor Fatio., *Deser. de la Faune de Vertebres de la Suisse*, 1869. Vol. i., p. 152. Also, Bell's *Brit. Quad.* 1874. pp. 290, 314, 325, 335, 345, &c.

† These names, and those that follow, employed by the shepherds, will be explained.

cultivated, or at any rate more sheltered, lies along the lower part of the valley, and borders the moist *bog* land, of which the more luxuriant growth had already been cut, and stacked for winter hay. These spots continue fresh and verdant till the frost and snow of winter render them also no longer available for feeding. The sheep are now reduced to considerable straits, and fall off in condition. Still they struggle bravely against the adverse elements, picking every blade that is visible, and even scraping the snow away with their feet to get at the grass beneath. "At all times," says the Ettrick Shepherd, "when the ground is not covered with snow, sheep find upon it sufficient fresh food." "I have often," he continues, "stopped in the middle of a flock in fields half covered with snow, where no grass whatever was to be seen. The sheep, however, having their eyes nearer to the ground, perceived the points of some leaves, and scratching with their feet to obtain more, seized it with their teeth, even pulling up the roots with their leaves."* The shepherd now comes to their assistance and doles out the bog hay, which had been stored for such a contingency, and this enables them to struggle on till herbage revives with returning spring. The earliest plants that appear, which are known by the vernacular names of *moss*, *ling*, *spret*, &c.,† then afford them

* Hogg's Shepherd's Guide, 1807, p. 226. See too Sir John Sinclair's Observations on the Improvement of Wool, 8vo. Edin. 1792, where he calls the hill sheep "excellent snow-breakers, accustomed to procure their food by scraping the snow off the ground with their feet, even when the top is hardened by frost. They have never any other food besides the grass and hay produced by their own hills." Page 66.

† For the identification of these local terms, I am chiefly indebted to Mr Hardy. The references quoted are to Dr George Johnston's Natural History of the Eastern Borders, 1853, Jamieson's Scottish Dictionary, Halliwell's Archaic and Prov. Dictionary:—

i. *Heather*, *He-heather*; *CALLUNA VULGARIS*. Sheep only eat it when it is young. It is, therefore, frequently burnt in spring. (Malcolm in the Shepherd's Guide, p. 331). *Heath*, *ERICA CINEREA* and *E. TETRALIX* are called *She* and *Bell-heather*, and are not liked by sheep. (Johnston, 136).

ii. *Ling*; *ERIOPHORUM VAGINATUM*. One of the earliest and most favourite grasses, eaten by sheep with great avidity, especially the roots. The first shoots and the flower stalks are generally known as *moss*. After flowering, the stalks are neglected, and the leaves which are then preferred are more properly *ling*. (Johns. 204).

iii. *Moss*, as above stated, appears to be synonymous with *ling*, and so the

welcome relief, until the luxuriant growth of summer restores them to plenty.

The importance of these early grasses to flocks emaciated by previous scanty fare, at a time when the ewes gravid with young, require more than ordinary nourishment to enable them to rear their lambs, explains how disastrous any diminution of their still scanty food might prove, whether from severity of weather or other unusual cause, such as the swarming of the voles.

Early in the year 1876 rumours were rife, of great numbers of field mice having made their appearance on several of the hill

Ettrick Shepherd uses it, p. 268. But Malcolm of Burnfoot, p. 331, says, "*Moss* begins to grow in February; and sheep eat it in the same manner as they do *ling*." Hogg also mentions "a short bluish grass, called *moss-prie* or *sword-grass*," p. 268, perhaps *Molinia cærulea*? The term *prie* is applied to several kinds of grass, as will be shown.

iv. *Deers-hair*, *SCIRPUS CÆSPITOSUS*, appears rather later than the preceding kind, with which it is sometimes confounded. (Johns. 203-4).

Bent, is a generic term: "a coarse kind of grass growing on hilly ground," according to Jamieson, of which several sorts are distinguished by shepherds.

v. *Bent-grass* is *AGROSTIS VULGARIS* growing abundantly on drier pastures. (Johns. 211).

vi. *Stool-bent*, *Rose-bent*; *JUNCUS SQUARROSUS*, common on all our moors, affording a good early bite to sheep in spring; they are said also to dig out the roots (Johns. 199).

vii. *Broad-bent*, *Flying-bent*; *MOLINIA CÆRULEA*, common on bogland. (Johns. 212). It soon dries, and the leaves are blown away by the wind. The sheep eat it for two or three weeks in spring, and then only sparingly, when nothing better offers, but it makes excellent bog-hay, and if cut early, is easily won.

viii. *Wire-bent*, *Black-bent*; *NARDUS STRICTA*; also applied to *AIRA FLEXUOSA*, abundant on the moors in summer. (Johns. 208). It is useful when it first sprouts, but it soon dries, and is then neglected by the sheep.

Spret, *spretty-grasses*, a general term for the succulent products of meadow or bog-land, but chiefly for the different rushes (*JUNCUS*) which are cut for bog-hay. The word is variously written *sprat*, *spreat*, *spret*, *sprot*, and has been derived from the Anglo-Saxon *sprauta*—a twig, but better from the Icelandic *sprott*, a reed. (Jamieson). It seems also to be connected with *esparto*, the local name of *MACROCHLOA TENACISSIMA*, the leaves of which are so largely imported for making paper. *Spart* is rendered by Halliwell, "the dwarf rush of the northern counties," which Prior (Botanical Names of British Plants) writes *spart-grass* (p. 218 and *spurt-grass* (p. 221) - *SCIRPUS LACUSTRIS*, the *bulrush*, deducing it from the Ang.-Saxon *Spyrtan*, which is from the Latin, *sporta*—a basket made of rushes, or from twigs of *SPARTIUM*—*broom*.

farms. Soon more particular statements appeared in the local journals, and the subject was discussed at the meetings of the Teviotdale Farmer's Club in March and April.

So serious had the evil become that, on the latter occasion, a Committee was appointed to visit and report on the infested localities. At the same time the Club printed and circulated a series of queries, inviting replies from farmers, shepherds, and others, likely to be most familiar with the matter.

The Committee accordingly inspected some of the farms, but they do not appear to have furnished a formal report. A sketch of it, however, prepared by one of the members, was printed in the *Hawick Advertiser* of May 13, which was accepted and discussed at the meeting of the Club on the 1st June following.*

The replies to the queries were not numerous, nor for the most part very exact. From all these sources, and from frequent private enquiries, the following particulars were obtained.

ix. The most common kind of *spret* is *JUNCUS ARTICULATUS* and its variety *J. LAMPROCARPUS*; a large constituent of bog-hay. (Johns. 199).

x. *Bull-snout*, *Bull's-faces*, *Starr-grass* of some; *AIRA CÆSPITOSA*, (Johns. 211); a valuable winter-grass, as none stand the frost so well.

Prye, *Pry*, is called "the bottom of *spret*," which alone is eaten by sheep when the *spret* gets old and hard. Several plants are included under this term, as:—

xi. *POA TRIVIALIS*; *Rough stalked Meadow-grass*, also called *Forked grass*. It forms one of the "Natural Grasses" as they are called, from the large share they contribute to meadow pastures. (Johns. 215).

xii. *HOLCUS LANATUS* forms the bulk of the "*Bottom* or *Benty bog*." It is also called *Midge-grass*. (Johns. 212).

xiii. *CAREX PANICEA* also is considered a *prye* grass, as are other species of *CAREX*, several of which appear to be confounded with other generic vernacular names (Johns. 207), but they are little prized as sheep pasture. This kind, however stands frost well, and is so far useful in winter.

Specimens of a grass which was sent from Dumfriesshire as having been much destroyed by the voles, under the name of *Cocks-foot*, were afterwards corrected to *Starr grass*. Of the two specimens received, one

xiv. *Cocksfoot* was found to be *DACTYLIS GLOMERATA*, which grows freely on *lea* land: the other, or *Starr-grass*, proved to be the *AIRA CÆSPITOSA*, already noticed as *Bull-snout*. (See No. ix above) The term *Starr* appears to be generic. Jamieson renders it by *CAREX CÆSPITOSA*; Halliwell by "Sedge, grass of the fens." In the *Flora Suecica*, all the species of *CAREX* are given by Linnæus as kinds of *Starr*.

xv *Farey* or *Fairey*; *RANUNCULUS* sp; probably *R. REPENS* or *R. BULBOSUS*, was reported to have been greedily attacked by the voles.

* It is appended as an authoritative document.

The district most seriously affected consists of a cluster of farms at the head of Borthwick water, which falls into the Teviot, three miles above Hawick. The centre of the group is Howpasley, which, with Craikhope, Wolfcleugh head, and part of Craik, all in the parish of Robertson, belong to the Duke of Buccleugh; adjoining them are Ramsay-cleughhead and Hislop, in the parish of Teviothead, and the estate of Tushielaw. Beyond them is Langshawburn, which was too close to escape such dangerous neighbours; as were other farms in Eskdalemuir parish; while several in Ettrick-head and Tema water were attacked in a greater or less degree, but not to be compared with the first mentioned six farms. In Nithsdale and Western Dumfries, the parishes of Tynron, Penpont, and Durisdeer were among those that suffered most.

For two or three years previous to 1876, the voles had been observed to be on the increase. In the spring of 1875, the ground which had been covered with snow since December, was found to be riddled with holes under the wreath-drifts, and denuded of herbage, by the voles that had found shelter there. Great numbers were seen throughout the summer, when cutting the bog hay. The shepherd at Craikhope described the children as "amusing themselves by hunting them from morning to night, as long as they could find nothing better to do, so that each day," he believes, "they destroyed hundreds, and the dogs devoured them, till they made themselves sick!" In the autumn of the same year they continued plentiful. The farmer of Howpasley, "when cutting a four-acre field of corn, observed numbers to be driven inwards by the reaping machine, so when only a spot in the centre of about 20 feet by 5 remained, he made one of the men take a scythe, and cut it slowly, a woman lifting behind. The others surrounded them and killed the mice as they came out; and somewhere between 80 and 100 were thus destroyed, most of which were eaten by six dogs present." "I used to kill scores of them," he adds, "with a stick while walking over the hills."

The same thing was observed in a greater or less degree, wherever the conditions of the ground were favourable to them. A correspondent to a county paper* relates that when "removing a two-year's crop of hay in the autumn of 1875, from a meadow

* Kelso Chronicle, 1877.

sloping down to the Bowmont, on the farm of Sourhope near Yetholm, two to four nests were found under every rick, each with six to nine young ones, the nest lying in a cavity from which runs diverged in every direction. Great numbers were killed by the boys assisting. One little fellow got 79 full grown ones for his share, and his straw hat was brimful of young ones."

Their numbers already redundant were augmented by the mild winter of 1875-6, and in the succeeding spring, they made their presence felt in the doomed farms. During the three months from February to April, they completely destroyed the pasturage of the bogland in Borthwick water, and were then driven to the *bents*. Notwithstanding the means used for their destruction, which, however, were not very skilful, the swarms showed little diminution. The public journals suggested a trial of the plan, which had been so efficacious in the New Forest, where holes were dug into which they fell, but the hint came too late. More efficient auxiliaries appeared in the shape of hawks, foxes, weasels, &c., attracted by the abundant prey. Buzzards, which have long been strangers to the district, again made their appearance. A shepherd in Eskdalemuir saw seven of the rough-legged species (*Buteo lagopus*) on the wing at the same time, and the short and long-eared owls were observed in still larger numbers. By the middle of April the herbage was so much impaired that the voles themselves began to feel the want of food, and the occurrence of severe frost, with a sprinkling of snow, about the middle of the month, completed their discomfiture. Many died of starvation, and by the end of May they had mostly disappeared.

When the Committee of the Farmer's Club made their inspection, they found that fully one-third of the pasture in the places visited had been destroyed. The true bog-grass especially, on which the sheep mainly depend in April and May, had been eaten down to the roots. The ground was strewn with dried stalks and blades, mixed with tufts of fur, limbs, and other remains of the depredators. The sheep were in deplorable case. Several had died. The emaciated ewes, too weak to make good nurses, suckled their lambs with difficulty. Numbers of these had perished in consequence, and the survivors were poor and weakly.

On the return of the Committee, the causes of such an unusual

visitation were discussed at the next meeting of the Club, on the 1st of June. Much weight was not attached to the popular explanation that it was owing to the destruction of vermin for the preservation of game, because no more hawks, owls, weasels, &c., had been destroyed than usual. More importance was attached to the absence of "black-frosts" during the last few years, which in a hard season kill the mice in their superficial holes. A curious coincidence was observed by one or two members, between the abundance of mice in some places, where moles had been well nigh extirpated and their scarcity where these were plentiful, but this was disputed by others, and cases in which it did not apply were adduced. The second theory was the one most generally accepted, but at the same time an opinion was expressed, that "farmers and game preservers should be careful not to destroy the natural enemies of the mice."*

The conclusion at which the Club arrived, was in the main, no doubt, the true one. But too little weight was attached to the two other explanations mooted. It may have been, and probably was, quite true that the destruction of vermin, for the protection of game, had not been greater of late than usual. The fact is, there was no occasion for it. So successfully has the war against birds and beasts of prey been waged for a long period, that as Naturalists well know, several of the most useful indigenous species have been wholly or well-nigh extirpated.† The

* Hawick Advertiser, June 3rd, 1876.

† The rooting out of raptorial birds has been followed by other ill results. Wood-pigeons have increased to a mischievous extent, and the grouse disease is attributed by competent judges to the same cause. The buzzard, besides devouring mice to a large amount "is just the kind of instrument wanted," says Mr Robert Gray (*Birds of Scotland*), "to clear off sickly young birds, which, on arriving at maturity, yield a degenerate offspring. Of somewhat sluggish habits, it does not care to interfere with strong-winged birds, being content with those that, through wounds or a naturally feeble constitution, are unable to save themselves. Thus strong birds only are left and a healthy breed is secured."

The same may be said of other slow-flying kinds, as the marsh harrier and hen harrier (the name of which in Gaelic is *luèh shealgair*, or mouse-hawk). These, with the useful glead, have entirely disappeared from the Border districts; and the kestrel, "that friend to the farmer," whose mouse-destroying propensities are so well described by Waterton, is becoming rare.

Of quadrupeds, the harmless badger is no longer a denizen of our hills,

systematic destruction year after year of creatures like the weasel, stoat, owls, and hawks of every kind, which live in a great measure on rats, mice, "and such small gear," has been followed by the natural results. Their part in the economy of Nature is to keep the smaller animals within due bounds. The removal of that check allows these to overpass their proper limits.

The doubt thrown on the other statement, that mice are rare where moles abound, and *vice versa*, was due in part to an erroneous explanation, advanced in support of it. Believing the short-tailed mice to be insectivorous, like the shrew and the mole, it had been supposed that they would thrive and multiply on the more plentiful supply of worms, &c., ensured by the removal of the latter, but this was contradicted by their decided preference for a vegetable diet. The statement, however, first broached, is not without foundation. Continental Naturalists* include the mole among the enemies of the *Arvicola*, and an old esteemed member† of our own Club, distinguished for his accurate and intelligent observation of natural phenomena, sent the following results of his experience, in a letter to a local journal, dated from Dunston Hill and Hedgeley, 15th July, 1876:—"The natural enemy of the little rodent which has done so much harm in the Roxburghshire moorlands, is the mole, which is a most voracious, carnivorous creature, preying greedily on its own kind (the stronger killing the weaker) whenever there is any deficiency of earthworms.

"The moles will, infallibly, keep the short-tailed mouse-vole in complete check, wherever the due balance of Nature is not disturbed. The mole abounds up to great elevations upon the Northumberland moors, and, as a moorland proprietor, I should be very sorry to see it disturbed. It is a smaller variety than the mole of the low country. By throwing its casts upon the

among which the names of many spots, as the Brockielaw, the Brockleugh, Brockleburn, &c., survive to mark its former haunts. It is, however, still preserved at Mellerstain. But the polecat, marten, and wild cat are extinct, and the stoat is no longer numerous. A fair sprinkling of weasels, which, in several parts of England, are called the *mouse-hunt*, or *mouse-hunter*, still continues to elude the vigilance of the keeper, but when seen they meet with no mercy.

* Fatio, *Campagnols du Leman*, p. 15.

† Ralph Carr-Ellison, Esq.

bent, and among the grass, in the boggy hollows, it tends beneficially to give a top-dressing, for as the Ettrick Shepherd, long ago, admirably explained, the sheep and lambs never fail to spread the mole-casts, and in the act of so doing, grind off the superfluous growth of their own hoofs. I never heard of a Northumberland farmer killing moles upon the moors, nor of a landlord fool enough to do it for him.”*

That the excessive propagation of the voles was due to the mild character of the four or five winters, preceding 1876, is proved by the subjoined return of the temperature and general features of the winters from December, 1870, to May, 1876, obtained from the Scottish Meteorological Society,† for which, my

* The Swiss naturalist, Fatio, already referred to as having studied the habits of the vole with so much care, includes the hedgehog among the number of its enemies. Like the mole it is carnivorous, and doubtless preys on mice, while it does good service by destroying slugs, worms, &c., yet no animal is more ruthlessly persecuted by the keeper, who never fails to drive his heel into every one he sees. Fortunately for itself, however, it rarely comes out during the day, and so is by no means scarce. Being overrun with rabbits, I employed two warreners to kill them, into whose unbaited traps 76 hedgehogs fell in 1877. They also, in like manner, unwillingly caught 363 rats, which threaten to become a worse enemy than either rabbits or voles.

The indictment against the hedgehog and the weasel of sucking eggs, is true to some extent; but is amply condoned by the service they render in destroying noxious creatures. The cock pheasant, as I myself have seen, does not scruple to peck the eggs of his mate, for which others, no doubt, bear the blame!

† Winters in the South and East of Scotland during 1870-76 :—
1870-1.

December, 1870. Temp. $3^{\circ}.9$ *below* the average; frost nearly every night from the 17th; the temperature falling to 5° , 12° , and again to 12° and 17° , which were the four coldest nights. Rain fell on the 14th and 15th to the amount of 1.84 inch. Snow fell in some places on 9 days after the 15th, and on the 30th 9 inches lay on the ground.

January, 1871. Temp. $2^{\circ}.6$ *below* the average, much frost during the month; 14° twice and 16° and 19° twice being recorded.

February. Temp. $4^{\circ}.4$ *above* the average, very little frost during the month. Rain from 3rd to 8th 2.17 inches; in some places more.

1871-2.

December, 1871. Temp. $0^{\circ}.7$ *above* the average; frost little. Snow a little on the first four days, and from 20th to 23rd.

January, 1872. Temp. $3^{\circ}.2$ *above* the average; little frost. Rain fell rather heavy. Snow on the 1st, 2nd, and 19th, to 26th; lying 3 inches deep in some places.

best thanks are due to Mr Buchan. They show unmistakably that from February, 1871, to January, 1876, the temperature of the winter months was higher than the average, and attended with little frost. A slight exception is found in February, 1873, and a more marked one in December, 1874. But the frost in the former was slight, and in the latter was accompanied by much snow, which lay long and deep, giving effectual protection to the voles, as stated by several farmers and shepherds, who speak to the appearance of the ground under the wreaths, after it melted.

Thus favoured, they continued to prosper during 1875, and were prepared to pour forth their swarms in 1876. The change of weather, which took place in April of that year, together with scarcity of food and the increasing assaults of their enemies combined, to rid the district of their presence.

February. Temp. $3^{\circ}.9$ *above* the average; very little frost. Heavy rain from 20th to 24th, with snow from 19th to 28th.

1872-3.

December. Temp. 0.3 *above* the average, but fell several times below freezing, once to 18° . Rain in some places, on 8th, 17th, and 22nd.

January. Temp. $3^{\circ}.9$ *above* the average. Frost very little, temp. only once falling to 18° . Rainfall heavy on 3rd, 9th, 16th, and 18th.

February. Temp. $1^{\circ}.8$ *below* the average. Hard frost on the 2nd, 3rd, 23rd, 24th, and 25th, temp. falling to 16° , 15° , and 19° . Little rain: but a good deal of snow fell from 1st to 8th, on 10th, and from the 22nd to the 25th.

1873-4.

December, 1873. Temp. $2^{\circ}.9$ *above* the average. Not much frost, and that chiefly in the first half of the month, when snow fell at intervals.

January. Temp. $5^{\circ}.9$ *above* the average, with scarcely any frost, the lowest temperature being 27° . Rain fell on the first half of the month; and some snow from the 16th to the 22nd, and at the end of the month.

February. Temp. $0^{\circ}.7$ *above* the average; no continued severe frost, but temperature fell to 17° on the 11th. Little rain, some snow at intervals.

1874-75.

December, 1874. Temp $8^{\circ}3$ *below* the average. The month throughout was noted for continued hard frost, which was severe from the 22nd to the 24th, and from the 28th to the 31st, the temperature falling to 3° , and in some places to half a degree above zero ($0^{\circ}.5$). The month was also remarkable for the great quantity of snow, and the frequency with which it fell over the whole country.

January, 1875. Temp. $5^{\circ}.4$ *above* the average, with very little frost, and heavy rainfall. Some snow fell at intervals.

February. Temp. $1^{\circ}.3$ *below* the average, but no continued hard frost, and but little rain. Snow fell from the 8th to the 10th.

The opportune arrival of these useful auxiliaries must be accounted for by the same elemental conditions that promoted the increase of the voles, for it was not merely at the places where the latter appeared in such swarms, that their advent was observed. It was noticed all over England.*

It is difficult to estimate the cost of the injury done to the farms which suffered most, because it must be viewed under so many aspects. Thus, besides the loss of animals by death, allowance must be made for the impaired condition of the survivors, the diminished sale of lambs, draft ewes, and wool, the inadequacy of the rising stock to keep up the *hirscl* to its full-producing strength, &c.

1875-6.

December, 1875. Temp. $1^{\circ}.1$ above the average. Frost only from the 2nd to the 8th, the temperature falling on one occasion to 18° . Rainfall heavy from the 18th to the 25th, amounting in those days to 2.11 inches.

January, 1876. Temp. $3^{\circ} 9$ above the average. The thermometer fell to 15° on the 9th, but there was no continued frost. Rainfall small.

February. Temp. $0^{\circ} 3$ below the average. Frost rather sharp from the 9th to the 14th, and rainfall heavy at the beginning and end of the month. Much snow fell from the 2nd to the 15th; from 19th to 21st; and on the 24th and 25th but did not lie.

March. Temp. $2^{\circ} 3$ below the average. Snow fell generally in the south from the 6th to the 22nd.

April. Temp. $1^{\circ}.1$ below the average. Snow fell from the 10th to the 13th with very severe frost. Thermometer ranging from 15° to 18° .

* The frequent capture of the rough-legged buzzard in 1877, has already been noticed (*The Field*, vols. xlv., 504; xlvii., 158, 388; xlviii., 747; xlix., 488, &c. Club's Proceedings, vol. vii, 463, 510, and 524; vol. viii., 111, 139, 142, 155, 178, 190, 353).

Owls, too, were far more common than usual. The short-eared species in particular, made its appearance in unusually large numbers. A correspondent of *The Field* states that flights of them appeared during the month of October, 1877, and on one day, the 17th, he saw them "perched on the rocks at low water, as many as ten at once, having just arrived, and resting before making inland." Vol. xlix., 12, 44, &c.

Professor Newton writes, that in several recorded instances of the undue increase of small rodents which he narrates, "owls are mentioned as thronging to the spot, and rendering the greatest service in extirpating the pests; * * * * and it would appear that the short-eared owl is the species which plays a principal part in getting rid of the destructive horde. An additional fact of some interest was noticed by Wolley, namely, that under such circumstances the owls seem to become more prolific than usual," and he refers to instances of as many as 7 or even 10 or 12 eggs being laid in one nest. Yarrell's *British Birds*, by Alfred Newton, i., 163 (1872).

One experienced agriculturist was of opinion that, on the 10,000 acres of the Borthwick water pasture which had been wasted to a greater or less degree, the damage could not be taken at less than £5,000.

The foregoing statements refer only to the mischief done by voles in grazing grounds, but they have been found even more destructive in woodlands, the most familiar instance of which is that before referred to and described by Mr Jesse, as having occurred in certain new plantations made by the Department of Woods and Forests, in the Crown Lands of the New Forest, Hants, and Dean Forest, Gloucestershire, in the year 1814.

Shortly after they were formed, vast numbers of five-year-old oaks and chestnuts were eaten through, close to the ground, by field-mice. They appear to have had a predilection for hollies, climbing up to a height of 5 or 6 feet, and stripping the branches after they had barked the stem. It was on this occasion that the plan of destroying them by means of holes dug in the ground was first tried with success. During the three or four months that the visitation lasted, it was estimated that upwards of 200,000 mice were destroyed, aided by the attacks of their natural enemies, and by starvation, which forced them latterly to prey on each other.*

About 1825, the oak coppices on the estate of Cameron, in Dumbartonshire, were attacked, without apparent cause, and the depredators were discovered by the successful adoption of the above expedient, which entrapped them in numbers.†

The case of the Duke of Buccleuch's woods at Drumlanrig was brought before the British Association, at the Dundee meeting, in 1867, by Dr Grierson, who had noticed the mischief to be annually increasing since 1852. The trees chiefly attacked were the oak and ash, the holly being a special object of attraction, but they spared the pines and the mountain ash. This continued till the trees were twelve years old, when they were generally safe.‡ Dr Grierson had observed the same thing several years before on the estate of Maxwellton, in Glencairn parish.

* Gleanings in Natural History, i, 166.

† M.S.

‡ Report of Brit. Asso. for 1867, pt. ii., p. 82.

In the letter quoted above, from Mr Carr-Ellison,* he stated incidentally that he had "once nearly lost all the beeches in a plantation where the ground had been planted about three years, and was full of long grass. The young beeches were eaten round just above the earth, the sweet bark being entirely stripped off."

In all these instances the voles exhibited a preference for deciduous trees (the holly excepted). But it is not always so.

In a graphic account of some plantations on the estate of Rannoch, in Perthshire, obligingly communicated by Sir Robert Menzies, he states that the pines only suffered, while the hardwood trees were spared. "In one instance 100 acres, and in another 40 acres were planted in 1848 and 1855, with Scotch fir and larch, intermixed with oak, ash, plane, elm, beech, and Spanish chesnuts. Early in the winter of 1863-4, the mice attacked the Scotch firs in both plantations simultaneously, eating away the bark, and sometimes the wood all round, as high as they could reach, which, assisted by the heather and long grass, was from six inches to a foot. The Scotch firs only were attacked, and it was difficult to distinguish those that were injured from those that had escaped in the long grass, which concealed the gnawed places, in this respect shewing distinctly the difference between the work of mice, and that of rabbits, the latter being visible at once."

After numerous attempts to get rid of them had failed, the following expedient was adopted:—"In the month of February, half-a-ton of half-inch draining tiles were laid down separately throughout the plantations, and a tea-spoonful of oatmeal was placed in each, which was soon discovered, and eaten by the mice. Phosphorus paste was then added to the meal, and latterly small quantities of arsenic. The plan succeeded perfectly, and in a very short time they were all destroyed. As food became scarce the survivors began to eat their companions that had been poisoned, and thus were poisoned in turn. Their skeletons picked clean, were found under the grass in all directions. No dogs were poisoned, nor did any other accident occur."

"Neither of the plantations have been visited by the voles again, nor do the trees seem much the worse for the severe thinning

* *Supra* p. 458.

they have received, albeit not in accordance with the rules of good forestry.

"I do not find," observes Sir Robert in conclusion, "that the field mice will eat young trees as long as they can get grass and other natural food, for I have a plantation at present at Ardlarich, in Rannoch, planted in 1871, that is swarming with them quite as numerous as the former ones, and not a tree has yet been touched (1877) because the grass is still plentiful, but should that fail, the trees are all ready for them."

It thus appears that the field vole, when pressed, will attack any edible vegetable substance, and it cannot be doubted that under suitable conditions it would be found to be as injurious to the produce of cultivated fields, as it has been to pasturage and woodlands. At the very time when it was proving so troublesome on the Borders, a closely allied species, the *A. arvalis*, of Pallas, was devastating the cornfields of Galicia and Hungary to an extent that attracted the notice of the Hungarian Government.

Some of the reports made to the Minister of Agriculture Trade and Commerce, in 1877,* have been procured through the late British Consul General at Buda Pesth, but being in the Hungarian language, their purport has only been partially ascertained. As with us, the voles were observed to be gradually on the increase from 1872, and from the same cause, viz., a succession of dry, mild seasons. In 1875 they were very numerous in the Kolozswar district, but it was in 1876 that they swarmed over the cultivated fields in such numbers that the peasants doubted whether they had sprung out of the earth or fallen from the clouds! They devoured every article of produce whether grain or roots, corn, potatoes, turnips, lucerne. In the autumn of 1876 they attacked the vineyards, and when other food failed, devoured each other. Finally an epizootic disease broke out among them, which, at the end of 1876, swept them off in thousands. The dead were found to be covered with lice (*acari*?) which also infested the bodies of the living to a less degree.

By the spring of 1877 they had entirely disappeared almost as

* 1. Report by the Royal Agricultural Institute of Keszthely.

2. " " Royal Agricultural College of Kassan.

3. " " Royal Agricultural College of Kulozs-Monostor, in the district of Kolozswar, &c.

suddenly as they came, a result to which, in the opinion of the farmers, the heavy rains that fell at Christmas greatly contributed. When the ground was ploughed in the following spring, many mice were found dead in their holes, but by no means in proportion to their previous numbers. As was the case here, birds and beasts of prey were found of great service; and regret was expressed that their wanton destruction was not checked by law. It was remarked that the cats which ate the diseased mice were affected by a similar disease, and that numbers of them died in consequence.

The *A. arvalis* differs little from our *A. agrestis* (if indeed it be distinct) save in being of a darker colour, although this character is very variable. In one report, indeed the description of those that devastated Transylvania coincides in every respect with the character of *A. agrestis*.*

Nor are such visitations matters of recent occurrence only. Did space allow, a curious and not uninteresting chapter of Vole literature might be collected from notices of their doings in times past among ourselves, supplemented by narratives of their depredations in other lands, as at Vienna, Magdeburg, Wurtemberg, and other parts of Germany.† I will content myself with quoting one or two instances by way of example.

* Since the above was written, the *Times* of the 12th July, 1878, reports that considerable excitement prevailed in Moldavia, by the sudden appearance of a species of mole (?) about two inches long, at the village of Fundar, in the district of Tekatch, on the Sereth, which "has already destroyed 120 acres of wheat so effectually that it was impossible to tell what species of grain had been sown." A correspondent of the Society of Arts writes from Smyrna, in March, 1878, that "they are visited this year with the plague of field mice, which have come down from the mountains, and are eating up the seed-corn and everything they can devour," and asks whether any remedy can be recommended. This called forth several replies, and among others a quotation from the *Globe*, suggesting that "The plagues of mice which have become a terrible scourge in many parts of Germany and Austria are, in a great measure, due to the practice of penning up the swine, instead of allowing them the range of the fields as formerly. * * * * * It is no unusual thing for a careful observer to detect pigs in the act of snapping up full-grown mice, while they have a special fancy for the nests containing the young, for which they have a keen scent, and which they grub up and devour with avidity."—*Journal Society of Arts*, vol. xxvi., pp. 388-482.

† Prod. Faun. Vert. Hung. Sup. in Trans. Zool. and Bot. Soc. of Vienna, 1862: by L. H. Jeitteles, vol. xii., p. 245: Mammals of Germany by J. H. Blasius, Brunswick, 1857: Illus. of Animal Life, by A. E. Brehm, vol. ii., p. 152, 1865.

In Stowe's *Chronicle* we read that "about Hallontide last past (1581) in the marshes of Danesey Hundred, in a place called South Minster, in the county of Essex, * * * * there sodainlie appeared an infinite number of mice, which overwhelming the whole earth in the said marshes, did sheare and gnaw the grass by the rootes spoyling and tainting the same with their venomous teeth in such sort, that the cattell which grazed thereon were smitten with a murraine, and died thereof; which vermine by policie of man could not be destroyed, till at the last it came to pass that there flocked together such a number of owles, as all the shire was able to yield, whereby the marsh-holders were shortly delivered from the vexation of the said mice. The like of this was also in Kent." Similar "sore plagues of strange mice" are recorded again in Essex in 1648, and at Hilgay, near Downham Market, in Norfolk, in 1745.

I will conclude this part of the subject by referring to the oldest mention of voles on record. The earliest is that related in 1st Samuel, v. 6, when the Philistines having carried off the ark of the covenant, were plagued by an epidemic disease, and their fields ravaged by swarms of mice.* The other is the statement of Herodotus (*Euterpe*. c. 141) of the invasion of Judea and Egypt by Sennacherib King of Assyria, and of the discomfiture of his army when encamped at Pelusium, on the frontier of the latter country, by swarms of field mice "which pouring in upon the soldiers, devoured their quivers, bowstrings, and the handles of their shields, so that next day when they fled bereft of their arms, many were slain." The event was commemorated by a statue of Sethón, the Egyptian King in the temple of Vulcan, with a mouse in his hand, which Herodotus himself saw.†

Canon Tristram, who has investigated the Zoology of Pales-

* The Hebrew version from which our translation was made, seems to be incomplete at this place, for both the LXX. and the Vulgate read: "And the cities and fields in the midst of that region, produced mice [or burst up, and mice came forth], and there was great confusion and much dearth in the city;" which is confirmed by the 4th, 5th, and 11th verses of the next chapter (vi.) where the Philistines presented expiatory golden images of "the mice that mar the land" when restoring the ark.

† Cary's Trans. The late George Smith, in the "History of Anct. Assyria from the Monuments," notices at p. 116, the correspondence of this narrative with that of the xxxvii. chap. of Isaiah and ii. Chron. xxxii., 21.

tine with much care, agrees with me, in considering the agent in both these instances to have been *A. arvalis*, the commonest species in Syria.

The ubiquity of the field vole, ranging from the sea level to 4,000 feet of elevation in this country, and much higher in continental mountain ranges; their readiness to adapt themselves to such vegetable food as offers; their consequent diversity of habit; and the variations of size and colour observable among them, when congregated in numbers; have given rise to a multiplication of species, established on specimens presenting only slight peculiarities. In the charming monograph of the Swiss *Arvicolinæ*, by V. Fatio, already referred to, these are reduced to five, each associated with numerous synonyms, as follows:—

1. *A. glareolus*, Schreber, 1775-92, with 13 synonyms. Illiger has formed it into a separate subgenus (*Hypudæus*) distinguished by the molars having distinct roots.
2. *A. agrestis*, L. Faun. Suec, 1746, with 10 synonyms.
3. *A. amphibius*, L. Sys. Nat. xii., ed. 1766, with 26 synonyms.
4. *A. arvalis*, Pallas, 1788 (the type *campagnol* of Buffon), with 13 synonyms.
5. *A. nivalis*, Martins, 1841, with 5 synonyms.

At the same time M. Fatio regrets that his limits preclude him from noticing other species in neighbouring countries, such as *A. ratticeps* and *A. campestris*, of Blasius; *A. subterraneus* and *A. Savii*, of De Selys; and *A. socialis*, of Pallas, from the Volga.

These, with some others, have been formed into a subgenus, or group, characterised by the smallness of the ear, and hence named *Microtus*, an exhaustive examination of which has been made by Prof. L. H. Jeitteles, in a paper read to the R. and I. Zoological and Botanical Society of Vienna, on the 7th of July, 1876, in which he comes to the conclusion that they all belong to one and the same species, inhabiting the plains, and to a considerable elevation, the mountains of Central Europe, Italy, and Spain, and he is sure that they will be found also in Greece and Turkey. He attaches little value to most of the characters on which these distinctions were founded, such as the number of mammae, the presence of additional ribs, the proportionate length of the tail, the defined separation of colour between the back and belly. The only constant mark that he recognises is the number of tubercles or pads on the sole of the hind foot, which are five in

Microtus, and six in *Arvicola* (except in *A. amphibius*), but he does not rely on the spaces between the zigzag ridges of enamel, and the number of their angles on the surface of the molars, on which the main specific distinction of the *Arvicolæ* appear to rest.

I cannot help thinking that too much weight is attached to this character likewise, and that a more extended comparison of many specimens would shew these minute differences to be by no means constant. The distinction between *A. agrestis* and *A. arvalis* is supposed to lie in the second upper molar, but Fatio, himself, is puzzled by finding "une dentition mixte" in individuals of *A. agrestis*. He attributes these, and certain other divergencies, to "the effects of age, alimentation, season, and different conditions of level and habitat in which such individuals are forced to live" (page 71 and figs. 19, 24, 25 of Plate I.), but he considers that the constant form of the second upper molar covers all deficiencies.

Allowing this to be so, I cannot admit that it constitutes a structural character of sufficient value, on which to establish a species, and looking to the wide distribution of the field vole, to its identity of habit in every situation, and under very divers conditions, I cannot bring myself to believe that *A. arvalis* is distinct from the species originally established by Linnæus, under the name of *A. agrestis*. Fatio arranges his true *Arvicolæ* as inhabiting plains (*Praticola*) or forests (*Sylvicola*), *A. agrestis* being the sole example of the latter, a fallacious distinction, for in this country it is more frequently found in meadows than in woods. *A. amphibius*, which stands among the *praticolæ*, was at first separated from certain individuals living at a distance from water, which were formed into a distinct species by Linnæus himself, as *A. terrestris*, in contradistinction to *amphibius*, and it was accepted by Savi, Fred. Cuvier, Schinz, and others. It has also been recognised as inhabiting hills, and named *monticola*, but all have merged eventually into a single species as *A. amphibius*.

I feel justified, therefore, in concluding that *A. agrestis* and *A. arvalis* form but one species, which should stand under the name originally assigned to it in the *Systema Naturæ* of *A. agrestis*.

Sketch of proposed Report of the Committee of the Teviotdale Farmers' Club, referred to at page 454.

FOR some time back occasional notices have appeared of the ravages of mice on some of the pastoral farms of upper Teviotdale and adjoining districts, and perhaps the matter has received less attention than it deserved, owing to the impression that the accounts were exaggerated, as a scourge of the kind was to any serious extent a novelty in the stockmaster's experience. At the last meeting of the Teviotdale Farmers' Club at Hawick, however, some conversation took place on the subject, and such testimony was borne by eye-witnesses of the destruction of the pastures by the vermin as led the members of the Club to believe that the evil was of sufficient extent and character to justify some inquiry regarding its cause, with the view of endeavouring to devise a remedy. A committee of the Club was accordingly appointed to inspect some of the most severely infected hill farms, and in order that perfect impartiality might be secured, some lowland farmers who have not suffered from visitations of the mice, and other gentlemen unconnected with agricultural pursuits, were nominated on the committee, with other members having large pastoral holdings.

The infected district extends generally over the lands adjoining the watershed between Teviotdale and Eskdale and Liddesdale, but on some farms the damage is only to a limited extent. The committee resolved to visit one or two where the greatest mischief was reported to have been done, and the farm of Howpasley at the head of the vale of the Borthwick was selected for a beginning. Howpasley is a large farm in the parish of Roberton, the most westerly parish in the county. The farm forms part of the southern boundary of Selkirkshire, where it marches with Craik in the latter county, and also of part of the eastern boundary of Dumfriesshire, where it marches with Moodlaw in Eskdalemuir. It has for two leases been farmed by Mr James Oliver, whose stock and wool have always ranked high in the market. Craik, which has also suffered greatly by the mice, is tenanted by Mr John Moffat, another well-known breeder of Cheviot sheep. Contiguous to these farms, to the west of them, and also reaching to the boundary lines of Selkirk and Dumfriesshires are Wolfcleughhead and Craikhope, tenanted respectively by Mr Robert Govenlock and Mr Bell of Castle Orr. The quality of the stock on their holdings has likewise enjoyed high reputation, and they are in a similar plight as regards the invaders of the pastures. All the four farms are the property of the Duke of Buccleuch.

The committee first visited Howpasley a few days ago, and were shown over the farm by Mr Oliver, jun., and Mr Moffat, Craik. Mr Moffat stated that the scourge had not come suddenly upon them, for the mice had been steadily increasing in numbers, and in the extent of their devastation during the past five years. They had so thoroughly consumed the pasture which should be ready for the sheep in the spring months on the lower and more sheltered grounds, that these were now abandoned by them for higher regions, where the work of destruction was still in active progress. This was quite borne out by the inspection of the lower slopes on Howpasley Hill.

There the pasture is known by the name of "true bog," and the grass destroyed by the mice is in the shepherd's vocabulary called "spret." It is much relished by the sheep in April and May, and at the time of the committee's visit should have been about two or three inches long, and of fresh green colour, affording a full bite till the later grasses come to maturity. In many places, however, there are no traces of its existence as a living plant. Instead of green herbage, there are large tracts covered with dead grass, the tops of the plants cast aside by the vermin. Where it can be seen, the young shoots are just beginning to appear above the ground, the tops bearing unmistakable signs of having been nibbled. The mice eat it at the white part just above the root, and though they do not in every case entirely destroy its vitality, they so retard the progress of the grass that it is not forthcoming at the season when it is most in request by and indeed indispensable to the healthy condition of the sheep. But perhaps the most striking evidence of the mischief is found in the thick grass bushes known as "bull snouts." An application of the hand or foot to these shows that their weight only keeps them in their places, the vegetation connecting them with the soil being completely severed by the mice. On removing them the bare earth and withered stalks and roots are alone visible, varied here and there by the reviving nibbled shoots already alluded to. All around, too, are traces of the retreats where the depredators retire in the hour of danger, the surface of the ground being literally riddled with holes, and presenting much the appearance of ground in the neighbourhood of targets for rifle practice. On repairing to the higher lands and among the "bents," where the mice are now at work, similar evidences of their presence are to be seen, though the havoc made there is not yet quite so considerable. It is conjectured that they may not so much relish the food they get at the greater altitude, but it is quite sufficient to sustain them till, if unchecked, the more favoured pastures are again in readiness for them. The committee next visited Craighope, where the same disastrous state of matters was apparent, and the mischief is pretty equally distributed over the four farms mentioned.

It is not too much to say that the vermin have destroyed 30 per cent. of the grass which should now be available for the sustenance of the sheep. At any time this would be a serious matter, but in the lambing season it is peculiarly unfortunate, especially in a year when "lingering winter chills the lap of May." The ewes are in such poor condition that they have little or no milk for their lambs which, brought sick'y to the world, are perishing in large numbers, and unless the unlicensed depredators of the pastures can be extirpated, a considerable reduction of the numbers of the flock must be resorted to as a prudential measure.

The committee saw a few of the vermin on the uplands, but, quick of sight and hearing, they made for their holes so rapidly that it was with difficulty one or two were captured. They do not in all respects resemble either the house or the ordinary field mouse. They are from three to four inches long, with a short stumpy tail, have bright piercing eyes, and large ears almost level with the fur. They are brown-coloured on the back and ash-coloured on the belly. The stomach apparently contained vegetable matter only.

This of course may be held as disposing of one theory set up by some experienced shepherds for the great increase of their numbers on the hills. The mole—long a pest against which the pastoral farmer has made war—has now been so nearly stamped out in the district that only a brief annual visit of the mole-catcher is needed to keep it from doing appreciable damage. Some shepherds have conjectured that the food of the mole, consisting of snails, worms, and various members of the insect tribe, having multiplied in absence of the enemy, the mice have been attracted by, and thriven on, the abundance of animal food thus left in store for them. But if it can be established that the mouse of the hills does not feed on the same diet as the mole, and when they can be had prefers the tenderest tit-bits of rich succulent grasses, it is clear no such inducement was required to bring them to the upland pastures.

A more plausible theory is that the mice have increased and multiplied owing to the absence of their own natural enemies, such as weasels, owls, and hawks. The gamekeeper is in his turn, the enemy of such beasts and birds of prey, which destroy the game in the egg and when the birds are young in preference to animals of inferior order. But in the district visited by the committee no complaint is made that the keepers have been more than ordinarily active in killing the natural ravagers of the game crop. Still, the best remedy for the plague of mice will probably be found in the importation to their haunts of greater numbers of their natural enemies, even though the game should, to some extent, pay tribute to the counteracting influences. In some parts of Eskdalemuir, where the mice have also done considerable damage, it has lately been noted that the owls are increasing in numbers. It is likely that the instinct of the birds of prey will direct them over the watershed, and they will be heartily welcomed by the farmers on the Roxburghshire border. Round the farmhouses of Howpasley and Craik there are dense fir plantations, which would prove most desirable day retreats for the owl, and the abundance of food awaiting it would make the region quite a paradise for the solemn bird of night. Then the erection of a few stone cairns here and there on the farms would afford accomodation for weasels, which would undoubtedly enjoy an abode in such plentifully stocked hunting grounds. The cat is all very well in its place, the dwelling-house, the stable or the granary, but it could not be induced even by the presence of great spoil to domesticate itself on the breezy hillsides of Upper Teviotdale; while traps would require to be very temptingly baited to compete with the sweet grasses of which, unfortunately for the farmers, the mice have shown themselves so fond. Besides, when an enemy has to be counted by millions, trapping could not very considerably mitigate the evil. Poisoning has been suggested as a cure, but the poison would require to be very carefully protected by placing it in the runs of the vermin, or surrounding it with wire netting, as if other animals besides those for which it is intended were to get access to it the cure would be worse than the disease.

The committee in reporting the result of their investigations to the Club will probably suggest what appears to them the most effective remedy, and it is understood that some of the members will take the advice of skilled naturalists on the subject. On one essential point they are agreed, that the plague

of mice is an evil of severe magnitude to the farmers where the pest prevails, and that if possible some remedy should be found and applied without delay.

One of the members of the Club's committee, a large pastoral farmer, and who has himself partially suffered from the incursions of the mice, gave it as his opinion that they had been nourished to their present strength and means of mischief doing by the peculiar character of recent winters. For four or five years back there has been no black frost on the hills. Frosty weather has prevailed, and sometimes been of long duration, but it has always been preceded by heavy snowfall, which has kept the mice in life all winter; whereas, were the ground unprotected by snow, a keen frost would penetrate into the earth as deep as their holes, and destroy them, if not entirely, at least in great numbers. Their holes are not more than six inches deep, for they are indifferent burrowers, and the frost would bind the earth as far as that. The only difficulty the committee had in reference to this theory was the doubt that the frost, however keen, would reach to the utmost verge of the retreats of the mice.

Note on Caddonlee School and the Nest. By MR JAMES
SMAIL.

I FIND that the school in which Leyden taught at Clovenfords, stands on Caddonlee ground at Caddon Mill, some 200 or 300 yards from Clovenfords. It is a very dilapidated thatched house, called "The Luggie," and is on the edge of the road. We, therefore, passed it on our drive away from Clovenfords.

The new Nest near Ashiesteel was built a few years ago, by a company of Waltonians, mostly hailing from Edinburgh. Every man brings his own provisions; and over these and the usual fluid accompaniments, the members, it is understood, make very pleasant evenings, and the "runs" of the day are talked over with hearty relish. The Robin's Nest, at Fairnalee, was long-tenanted by the same club, and this abode was left by the members with much regret. The club has numbered several men of note; and they have, at times, published both prose and verse of an enjoyable sort. The Robin's Nest is now occupied by a gamekeeper.

[This information arrived too late to be incorporated with the "Report."—J. H.]

On Howebottom, the "Hained Ground" at Bowhill, Selkirkshire. By the Rev. JAMES FARQUHARSON, M.A., Selkirk.

WHETHER we take the word "forest" in its ordinary sense of a great wood, or give it its more special meaning of a chase, a hunting-ground for the greater game, Ettrick Forest in our time belies its name. There is not a great wood in the whole county of Selkirk, and the greater game find no wild haunts there. In former days the district was the hunting-ground of the Scottish kings, with Newark Castle as their Forest residence, and the opening verse of "The Sang of the Outlaw Murray" tells us what the country was,—

" Ettricke Foreste is a feir forest,
In it grows many a semelie tree;
There's hart, and hynd, and dae, and rae,
And of a' wilde beastes great plentie."

In the olden time the higher slopes and the summits of the hills must have been as bare as they are now; but the bottoms of the valleys and the lower slopes must have borne a large amount of wood. Of this old timber little or nothing remains. It is perhaps represented by such patches of natural wood as we see in Yarrow or Tinnis Steel, in the neighbourhood of Ashiesteel, and in clumps of wild thorn scattered over the county. But from these slender remains we cannot form an idea of the appearance of "The Forest" when in its glory; for they occur generally in very exposed and barren spots, and they are open to the intrusion of cattle and sheep, which greatly modifies the appearance and vigour of natural wood. There is an interest, however, in inquiring into the aspect of the district in its uncultivated forest state, and in endeavouring to ascertain what were the prevailing trees and shrubs. To some extent an opportunity is afforded for answering such an inquiry by a botanical examination of Howebottom, the name given to a large piece of ground lying within the policies of the Duke of Buccleuch at Bowhill. I shall first describe the locality, and then give in detail the species of trees and shrubs which have established themselves in ground which, for many years, has been left almost in a state of nature.

Howebottom is a large irregularly triangular area, about 300 acres in extent, occupying the southern portion of the height on which Bowhill stands, where it runs out into Fauldshope Hill.

It ranges in height from 600 feet to 1,000 feet above sea-level, the upper and narrower portion being steep, the lower falling with a more gentle slope towards the east into the valley of the Ettrick. On the south side it embraces the pretty dell of Shiels-haugh Burn; and the surface rises in a low swell from the margin of the dell to fall on the north side into the hollow, from which the whole area has taken the name of Howebottom. A stone wall running parallel to Shielshaugh Burn divides Howebottom from Fauldshope Hill, on which sheep pasture; on the other sides it is unenclosed, and bordered by the woods of Bowhill, which consist of Scotch Fir, Spruce, and Larch, with a mixture of Oak, Beech, and Ash. At one of the lower corners it touches on an old wood. The general exposure is S.E., and considerable variety of soil and shelter is found within the limits I have described. For the most part the soil is the thin sharp loam characteristic of our Silurian district; but in the highest parts the rock is almost at the surface, and in the lower and more level portions a pretty deep clay soil presents itself. While these lower portions, and the margins bordered by the old wood are well sheltered, the extreme height, where the ground runs out to the apex of the irregular triangle, is much exposed, and open to the fierce blasts of the S.W. wind.

Since 1829, the whole of this ground has been "hained," *i.e.*, preserved from the intrusion of sheep and cattle; nor has any part of it been under the plough, with the exception of a few small patches near the lower boundary, where oats are sown as food for game. In a letter with which the Duke of Buccleuch has favoured me on the subject of this paper, His Grace says, "I took sheep and cattle off that ground several years ago for various reasons. One was to improve the picturesque effect by getting rid of the harsh outline of the fence of the Bowhill woods to the west; also to allow the growth of whatever might prove to be the indigenous trees and plants of the Forest, which had been kept down by the continued grazing of stock for many years. I hoped to have seen young Oaks spring up, but in that have been disappointed. * * The Oak of Ettrick Forest exists now only in tradition, though a few specimens still remain." In another note the Duke adds, "One part of my intention was frustrated, viz., that of seeing what natural plants, as well as trees, would grow and flourish there when 'hained' from

cattle, inasmuch as some portions of the ground were very wet and swampy, and were in consequence drained, thus preventing the growth of plants that flourish in wet and boggy places."

What Howebottom was before the Duke resolved to make it the subject of a most interesting experiment, may be seen by a glance at Fauldshope Hill,—a bare and treeless pasturage, bearing heather, and the common hill grasses, carices, and rushes. What it is, I shall endeavour to describe.

If the experiment of the noble proprietor has failed to secure the reappearance of the native Oak, it has fully accomplished his other intention, that of adding to the picturesqueness of the Bowhill ground. It is easier to give details, and to enumerate the species of trees and plants growing in it, than to convey an idea of the beauty of this wild spot. What strikes one looking on it from the opposite side of the valley is its boskiness,—a certain richness and fulness in the outlines of the trees and bushes, which have had room to grow, and which, standing singly, or gathered into small groups, present most pleasing objects to the eye. A landscape gardener would discover endless subjects of study here, and carry away innumerable hints; while the mere lover of the picturesque will find his eye turning again and again from the larger features of the scenery around, and resting with delight on this charming piece of bush-country. Viewed from Selkirk, in the early part of the present autumn, Howebottom has been especially attractive, with its groundwork of bright green bracken, its large beds of purple heather,—surely never blooming more splendidly than this year,—and its rounded masses of trees and brushwood, all lying in the embrace of the dense woods, and backed by the flowing outlines of the hills.

In the month of August, this year (1878), I made a tolerably minute examination of the trees and plants growing in Howebottom. With the exception of a few trees which have been planted for ornament, and which will be more particularly noticed afterwards, all the wood on the ground must be accounted native, the berries from which it has sprung having been carried by birds, or the seeds transported by the agency of the wind, during the fifty years the ground has been 'hained.' The Mountain Ash (*Pyrus aucuparia*), the Birch (*Betula alba*), and the Hawthorn (*Crataegus Oxyacantha*), are the most abundant trees, occurring in nearly equal proportions, although unequally distributed

over the ground. Thus, Birch trees are most numerous, as might be expected, in the neighbourhood of the old Birchwood at the S.E. corner of the ground. The Hawthorn appears most abundantly in the middle ground, and under the shelter of the high surrounding woods; while the Mountain Ash prevails in the upper regions, and indeed it alone grows in the highest and most exposed corner, becoming there a stunted tree or shrub, but still holding its ground, although evidently sore battered by the winter winds. There are a good many Scotch Firs (*Pinus sylvestris*) along the line of the Bowhill wood, and a few occur at a distance from the wood. Some specimens of the Ash (*Fraxinus excelsior*) are scattered up and down the whole area, but not one Oak, Beech, or Elm, nor a single Holly. Next to those already mentioned, the most conspicuous objects are three species of Sallow,—*Salix aurita*, *S. caprea*, and *S. cinerea*,—which are abundant and flourish vigorously, *S. caprea* often rising to the dignity of a well-stemmed tree. When I have named these eight species, I have exhausted the list of native trees, and tree-like shrubs growing in Howebottom, for I scarcely think a place in the list should be given to the solitary Plane (*Acer Pseudoplatanus*) on which I lighted.

As regards smaller shrubs, the Raspberry is pretty abundant; but I saw only one Rose-bush (*Rosa canina*), and no trace of the Bramble. A few plants of Juniper (*Juniperus communis*), which is rare in the district, grow among the heather on the height.

Turning now to plants of humble growth, it may be remarked that some species have occupied large spaces to the exclusion of every other. Taking a view of the whole ground, perhaps the Bracken (*Pteris aquilina*) is the plant that has most conspicuously asserted itself. Many acres bear bracken and nothing else, except the scattered trees and shrubs that stand among the fern. At one spot, where it has found both soil and shelter good, it attains a height of over six feet, and presents a serious obstacle to the steps of the wandering botanist. Elsewhere, and especially towards the highest part of the ground, the common heather or ling (*Calluna vulgaris*) occupies large spaces, and is evidently spreading to the eradication of grasses and other plants around the territory it has already subdued. I looked for *Erica Tetralix* and *E. cinerea*, but found neither of them. The grasses

I found most vigorous and common were *Aira cæspitosa* (whose local name is, euphoniously, Bull-snouts!), *Holcus lanatus*, *Agrostis vulgaris*, and *Agrostis communis*, and *Molinia cærulea*. Among these *Aira cæspitosa* predominates, and may be said to be the grass of the place. In moister spots, as at the sources of rills, and on flat places by Shielshaugh Burn, *Juncus acutiflorus* prevails. At the date of my visits, over the whole lower space, and especially where the soil was at all moist, the eye was everywhere caught by strong plants of *Angelica sylvestris*, *Scabiosa succisa*, *Senecio Jacobæa*, and *Spiræa Ulmaria*. At an earlier period of the year perhaps other species might be equally conspicuous.

About 27 years ago, some Deodars, Spruce Firs, and Common Yews were planted in Howebottom. They have grown well, and present an agreeable diversity among the rounded and bushy forms of the native shrubby trees. About the foreign character of the Deodars, of course, there can be no mistake; but in one sense it is unfortunate that, in a space abandoned to nature, and where one looks only for indigenous trees, the Spruce and the Yew should have been introduced. But for the information I received, I should, although with some surprise, have regarded these as self-sown. The same remark applies to a large thicket of Dogwood (*Cornus sanguinea*), which quite fills the upper part of the dell of Shielshaugh Burn. This, too, was planted, upwards of 40 years ago, some idea having been entertained, I am told, by a former factor on the estate, of utilising the wood in the manufacture of gunpowder. The lower course of this burn, I may add, presents the flora of any similar dell in the district. The barren fronds of *Blechnum boreale* hang pendent from the banks; Hazel and Alder (not, as far as I could see, found elsewhere in Howebottom), and Birch fill up the wider spaces; and the Male Shield-Fern and Lady Fern, with their congeners, adorn the course of the little stream.

It may be of interest to note the girth and height of some of the native trees. Those selected were not chosen as excelling their fellows, but as fair average specimens; and the girth of each was taken at a point immediately above the enlargement caused by the branching off of the roots. The measurements were as follows:—

Scotch Fir, No. 1.	Girth, 4ft. 0in.	Height, 25 feet.
———— No. 2.	———— 4ft. 9in.	———— 20 —
Birch, No. 1.	———— 2ft. 11in.	A low tree, the branches spreading immediately above the measuring point.
———— No. 2.	———— 3ft. 6in.	Height, 25 feet.
———— No. 3.	———— 3ft. 5in.	———— 25 —
Ash	———— 2ft. 1in.	———— 20 —
Salix caprea (?)	———— 3ft. 2in.	———— 15 —

Of the Mountain Ash no measurements were taken, as none of the specimens present a tree-like stem. They are simply large shrubs, beautifully oval in outline, and in general rising to a height of about 20 feet. The Hawthorns, spreading their branches widely, are more irregular in outlines and of less height.

The lesson I draw from the Howebottom experiment is that in the old Forest of Ettrick there was not a stately and uniform growth of large timber. I infer that the ground along the valleys was clothed with a dense brushwood of Hawthorn, Birch, and Sallow, Mountain Ash mingling with these, but flourishing more freely on the hill sides; while above this lower growth rose at intervals "many a semelie tree,"—the Fir, the Ash, the Oak; for although Howebottom offers no evidence that the Oak is indigenous to the district, remains of it preserved in our peat-bogs, attest that it once flourished as a native in the vales of Ettrick and Yarrow. As to herbaceous plants, Howebottom has produced no rarities; but I think the present state of its vegetation shows, that, given favourable conditions of soil and of shelter, certain strong-growing plants, such as *Calluna vulgaris*, *Aira cæspitosa*, *Pteris aquilina*, will strangle their weaker neighbours, and occupy the ground to the exclusion of every other species.

I must not conclude without expressing my obligation to Mr Reekie, Carterhaugh; Mr Mathison, gardener, Bowhill; and Mr Keress, Shielshaugh, who have furnished me with information, and varied assistance in the collection of facts for this paper.

NOTE.—Evidence that Ettrick Forest produced valuable Oak timber is not wanting in old records. Mr T. Brown, Woodburn, Selkirk, who is collecting materials for a history of Selkirkshire, has kindly supplied me with some of the following extracts and

references, which demonstrate the value set on the oaks of the 'Forest' in early times. They were worthy of being royal gifts :—

"Rotuli Scotiæ, vol. i., p. 5. By a mandate of Edward I., A.D. 1291, Simon Fresel, keeper of the Forest of Selkirk, is ordered to give to certain noblemen and gentlemen of Scotland, a number of stags (*cervi*) and oaks (*quercus*). William, Bishop of St. Andrews, receives 30 stags; Robert, Bishop of Glasgow, 20 stags and 60 oaks; Brother Brian, 2 stags and 4 oaks. See Club's Proceedings, viii., p. 285. Edward I., likewise granted to the monks of Melrose 40 oaks from the same Forest. (Rolls of Parl. ii., p. 469, quoted in Caledonia, ii., p. 982). The Abbey of Kelso having been burned by the English, David II., granted permission to the monks to cut wood in Selkirk and Jedwart Forests for reparation. (Robertson's Index, p. 63).

In the Accounts of the Lord High Treasurer of Scotland, A.D. 1496, a payment is entered to "Davide Achinsone, to fell axtreis in the Forest, and to get cart lymmouris to bring hame quhelis fra Melros."

In a lease given by the King to Patrick Murray, A.D. 1510, of lands in Selkirkshire, he is held bound, among other things, to maintain the plantations of oak, and of all other trees necessary.

In Elliot and Scot's MS., 1649, in Advocates' Library, at that date "some places remained well furnished with pleasant and profitable woods, especially for building."

Hodge's MS. in Advocates' Library, 1722, "There is word of several lots of timber going east from the Tower (Kirkhope) down the water for two miles, but now almost cut down."

MS. in Adv. Library, supposed to be by Dr Cranstoun, 1749, "Kirkhope, near which is the largest wood in all the Forest."

On the Border Family of Papedy of Ancroft, Dunglas, Manderston, and Berwick. By JAMES HARDY.

OUR knowledge of the family of Papedy, Papedi, or Pepdie, is very meagre, being mostly derived from the names of its members as appended to charters, or as participants in the benefits which those documents conveyed. The family is of unknown origin. The ancestor may have been a priest, A.S. *papa*, i.e. *sacerdos*.* Papedi, Sheriff of Norhamshire and Islandshire, occurs in 1110, as an official of Ralph Flambard, Bishop of Durham, 1099-1128, the shrewd but reprehensible chancellor and prime adviser of William Rufus.† He was probably an eminent man of the land, qualified to administer justice to an Anglo-Saxon population. Like many of his contemporaries, he had only a single name. Bishop Ralph having bestowed on the monks of St. Cuthbert in Durham, land in Allerdean and a valuable fishing called Haliwerestelle in the Tweed, directs, by a second precept, Papedi, the Sheriff, to put them in immediate possession, so that he might rid himself of the monks' importunities; but if he had cause for delay, Ralph, the bishop's nephew (*nepos*) was to perform this duty under Papedi's direction. The deed of gift, which is addressed to the theines and drenges (small land holders) of Islandshire and Norhamshire, is in the Anglo-Saxon language, which is susceptible of being with little change rendered into modern English: "R. bishop greeteth well all his theins and drenges of Islandshire and of Norhamshire. Wit ye that I have given to Saint Cuhtberht lands in Elredene, and all that thereto belongeth, clear and strife-free, and Haliwarestelle I have gifted to St. Cuhtberht; his own unto his church; and whoso spoils this brief, Christ him [deprive] of this life's hele (health) and heofnrices mirth" [the joy of the heavenly kingdom.]‡ The bishop compensated Papedi's faithful services with the possession

* "In the time of Gregory the Great, and, as some writers say, till the tenth century, the title of Pope (Papa) was given to all bishops in general."—Hook's *Lives of the Archbishops of Canterbury*, i., pp. 24, 25. It was not till 1059 that priests who lived in wedlock were forbidden to celebrate the sacred offices.—*Ibid.* p. 22. Synods passed decrees against the marriage of priests in 1076, 1102, 1168, shewing that the practice still subsisted.—*Ibid.*, ii., pp. 147, 251, 264.

† Raine's *North Durham* p. 45.

‡ Raine, *ubi sup.* pp. 219, 220; and *Appendix*, p. 129.

of the half of Ancroft (Anacroft) heritably, on condition of half a knight's military service being rendered at the Castle of Northam.* We find that either this personage, Papady, or a namesake, attached his signature as one of the witnesses to the foundation charter granted by Eustace Fitz-John, Lord of Alnwick, to Alnwick Abbey, which was founded in 1147.† Again, one of the name, a priest,—Roger Presbitero Papadio—witnesses the concession of a salt-pan to the canons of Alnwick, by William de Vesey, from 1216 to 1252.‡

The acquisition of the moiety of Ancroft terminated in heirs female before 1275. Wimarc or Wimart Papedi had married Roger de Audrei, Co. Durham, and survived him. The seal of Wimarc Papedi exhibits the well-known parrot or popinjay, the badge of the family.§ She bestowed tithes, rents of land, and of a couple of houses on the Durham monks in lieu of soul masses and for other devout purposes, accordant with the ideas of that age. Her sister, Matilda de Leya, the co-heiress, concurs in one of those donations, and affixes her seal. The seal represents a bird and a hound, and is inscribed on one side S. PAPEDI—the seal of Papedi; and on the other SIGILL. LVM., and some unintelligible letters—perhaps her husband's appellation. One of the documents is signed by a William de Lumleia; and were it a legitimate inference, which it scarcely is, we might say that we have in his name the *Lum* of the inscription, and the *Leya* by which the lady designates herself. This Lumley is a Bishopric family of exaggerated antiquity. Of it King James VI., after listening to its pedigree, declared that he never knew before “that Adam's name was Lumley.” The Lumleys (Earls of Scarborough), like the Papedies, carry in their arms the three green popinjays, but these are said to have been adopted from the Barons Thweng of Yorkshire, one of whose heiresses was married to Sir Robert de Lumley.|| The De Audres held a moiety of the vills of Ancroft, Felkindon, and Alvereden, and of the land of Emotehill, North Durham. In 1359, William de Dalden, who inherited from D'Audre, granted the moiety of Allerden and

* Raine, *ubi sup.*, p. 385.

† Hartshorne's *Feudal and Military Antiq. of Northd. i.*, p. 273.

‡ Tate's *Alnwick*, Appendix, p. xi.

§ Raine, *ubi sup.* Appendix and Charters, p. 130.

|| Burke's *Peerage and Baronetage*.

Felkington, in exchange for the manor of Rylley, near Durham, to Sir Thomas Grey of Heaton.* The other northern possessions were also alienated.

The origin of the Scotch branch (as identified by the coat of arms) of the family is, equally with the English, lost in the mists of antiquity. Nisbet, the heraldist, says that Eustachius Pepdie is a witness in a charter of King Malcolm IV., who reigned from 1153 to 1165.† The early Merse or East Lothian Papedies are witnesses, in deeds, for the most part, in which the Earls of Dunbar have interest. One of them, at least, was an officer in the household establishment of one of those noblemen. Stephen being an oft-repeated name in the family, the Stephens cannot be individually separated; and the deeds leave us in ignorance of the position of their lands. But as we afterwards find the bulk of the property at Dunglas, now in East Lothian, and one of the Stephens, as the head of the house, granting a sub-infeudation, we are perhaps not wrong in placing those of that name there. An Act of the Scottish Parliament, in the time of Charles I., 1641, says that the barony of Dunglas lay of old within the sheriffdom of Berwick, but was then within the constabulary of Haddington and sheriffdom of Edinburgh.‡

In the reign of William the Lion (1165-1124), Stephen Papedi witnesses a charter from Earl Waldeve (1166-1182) to the monks of Melrose of a community of pasture in—what is now the East Lothian—Lambërmor, along with himself and his men.§ The same Stephen signs a charter from Waldeve, Earl of Dunbar, concerning Edrom, of the date 1166; of this Edward de Aldecambus, a prominent name in that age, is a witness.|| During that period he signs another charter, which is granted by Patrick, the first of the name, who was at the same time Earl of Dunbar and March (1186-1232) relative to Edrom, the chapel of Erchel-dun, and the vill of Nesbit (East Nisbet). Other representative Mersemen testifying along with him are Gilbert de Home, Roudland, or Rouland the Steward, William the son of Edgar, Henry

* Raine, *ubi sup.* p. 220. † Nisbet's *System of Heraldry*, i. p. 349.

‡ Acts Parl. Scot., vol. vi., Part i., p. 267.

§ Liber de Melros, No. 76. This was known long after as "the Earle of Marches muire."—Inquisit. Retornat. Abbrev. Haddington, No. 338, May 19, 1680.

|| Coldingham Charters in Raine's Appendix, p. 26.

de Prendregest, Edward de Aldecambus, Alan de Swinton, William de Nesebite, &c. The name of Robert de Muschauns, lord of Wooler appears also.* In the reign of Alexander II. (1214-1249) Stephen Papedi witnesses a Coldingham charter regarding Little Reston, when Walter Olifard was justiciary of the King; Edward de Aldecambus with his sons Thomas, William, and Stephen, and many other men of the time also bear testimony.† Nisbet places this charter in the reign of King William‡ but Walter Olifard was a justiciary in the reign of his successor, and dying in 1242, was honourably buried in the chapter-house of Melrose.§ In the history of the See of Dunkeld, Bishop Keith quotes "Richardo de Præbenda et Stephano de Papedy," as being witness-bearers, to a deed, apparently of King William's reign, but without specifying his voucher.|| The deed concerning Edrom already cited Richard de Præbenda signs, but not in juxtaposition to S. Papedi.

John Papedi, in the reign of Alexander II., is a witness to the conversion of the lands of Halsington (in Eccles parish) into church lands in favour of the monks of Melrose, by Master William de Greenlaw. This territory had belonged to Matilda, the mother of Robert de Muschamp, the last lord of Wooler of that name, and had been the intended marriage portion of Gilia, her daughter, who was espoused to William Laundells, son of John de Hounam. The contract of marriage had not been fulfilled, for his wife's name, as we learn elsewhere, was "Dunantie de Cleresei;"¶ and the land falling to Matilda's son, he bestowed it on Master William de Greenlaw, who is pointed out as being the son of Roland, the son of William. His father may have been Rolland of Rollandston (now Rowenstane), steward to the Earl of Dunbar.** William de Greenlaw died in 1247, and in recompense of his beneficence to the convent was honoured with

* Coldingham Charters in Raine's appendix, p. 27. † Ibid, p. 72.

‡ Heraldry, i., p. 349.. § Chronicle of Melrose, by Stevenson, p. 185.

|| Keith's Catalogue of Bishops, p. 48, 1st Edit. ¶ Liber de Melros, No. 131.

** Roland de Grenlaw signs a Melrose deed relative to Sorulesfeld, dated 1208; and other articles subsidiary to that gift of Earl Patrick to the monks. Liber de Melros, Nos. 101, 102, 104. He also occurs in the Kelso chartulary. At one time William de Greenlaw was a clerk to Walter, bishop of Glasgow. Ibid, No. 45. He is frequently mentioned in charters of the period. He is not to be confounded with William de Alwenton, as Morton has done. Mon. Annals of Teviotdale, p. 266.

burial in the chapter house at Melrose. This deed was confirmed by the Earl of Dunbar as over-lord. Disseizen was given in his court at Edrom; and the transaction was completed at Berwick, 18th April, 1248, in presence of King Alexander II.* The period when John Papedy lived is thus clearly ascertained. His co-signatories are Ralph de Bonekil, John de Letham (Leitholm), David de Buredon, Alan de Harears, John the son of Simon, John de Lambeden, Robert his son, Roland the son of John.

Thomas Papedy, who may have been the second son of John, witnesses a confirmatory charter of the south town of Laynall by Earl Patrick ("for the salvation of my soul and Cecilia, my spouse") to Coldstream Priory. John de Letham is a witness. This Earl Patrick, was the seventh earl, from 1249 to 1269. Thomas Papedy, likewise, attests the gift by the same generous patron, to the sisters of this house, of a ploughgate of land in Haldhirsell (Old Hirsell). In a third deed of Earl Patrick, containing a confirmation of land to the Priory in the barony of Hirsell, adjacent to the Leet, David Papedy seneschall or steward for the time to the Earl, signs immediately after the Abbot of Melrose. David de Graham is one of the witnesses.†

In a restoration of possessions to widows, dated Berwick, Sept. 3rd, 1296, Edward I. restores to Elena, who was the relict of Stephen Papedy, her lands in the shire of Berwick.‡ This is perhaps the Stephen afterwards mentioned in connection with Manderston. He appears to have been succeeded by another of the name. In the reign of Robert I. (1306-1329), Earl Patrick confirms the confirmation and warrant of his predecessors respecting the land of Pitillishouche, which Master William de Greenlaw had conferred on the Melrose monks, as previously referred to; and also the land with which William of Alwenton had dotated them in the territory of Halsington. The witnesses were John the son of the Earl, William de Ramsay, Adam de Gordon, Henry de Haliburton, Edward de Letham, knights; Robert de Lauudir then our Seneschall, the lord Robert de Congilton our Chamberlain, Henry de Ellum, Edward de Cokeburn, Gilbert Heryng, Stephen Papedy, John de Malkaruerston. All the other bounties of the previous Earls to Melrose are enumerated

* Liber de Melros, Nos. 232, 233, 234, 235, 236. Chronicle of Melrose by Stevenson, p. 204.

† Coldstream Charters. ‡ Rotuli Scot. i., p. 26.

and confirmed. These were still again confirmed at Dunbar, 11th Jan., 1342.*

Sir Thomas Home of that ilk married Nicholas Papedy, heiress of Dunglas, and got with her the lands and lordship of Dunglas. In consequence of this marriage, the heralds say, that he added the arms of Papedy to his own, which have been marshalled with the arms of Home ever since,—viz., *azure*, three papingoes, *vert*.† Nisbet says that in the Collegiate Church of Dunglas he had seen his arms impaled with his lady's. "The shield of these arms was *couche*, and *timbred* with a cross helmet." These arms still retain their old position in the Home aisle at Dunglass, and they also appear above the private door by which the family entered the church. Two of the sons were notable men—Alexander who succeeded to Home and Dunglas; and David who obtained the lands of Wedderburn, from the Earl of Douglas. Godscroft, the historian of the Humes of Wedderburn, adopting the interpretation of the heraldists, latinises the name of his ancestress into Parrot ("Psittaci cognominato.") Indicative, says he, of this alliance are the cognizances of the Humes or Homes, six parrots in the family of Home, and three in that of Wedderburn, two lions argent being superadded.‡

In 1426, the seal of David Home of Wedderburn bears a lion rampant; but in 1437, a lion rampant supported by two popinjays. In 1437, the seal of Sir Alexander Home of Home, bore the three popinjays, which the Rev. James Raine makes "three martlets."§ Sir Alexander Home of Dunglas was taken prisoner at the battle of Homildon, or Humbleton, 14th Sept. 1402. On his restoration from captivity he founded the Collegiate Church of Dunglas in 1493, and largely endowed it.|| It is worthy of mention in connection with their descent, on the authority of Godscroft, that the chiefs of the family of Wedderburn were buried at Dunglas, till David V., who preferred to be laid at Dunse beside his first wife, Maria Johnston of Elphinston.¶ He died in 1616. Latterly in 1650, Sir David Hume of Wedderburn, and George his son, killed at the battle of Dunbar, were also buried at Dunglas.

* Liber de Melros, ii., p. 331.—Nos. 365 and 431.

† Douglas' Peerage, p. 342; Nisbet's Heraldry, i., p. 270.

‡ Davidis Humii de Familia Humia Wedderburnensi p. 6.

§ Raine's Appendix of Charters, p. 110. || Douglas' Peerage.

¶ De Familia Humia Wedderburnensi, p. 56.

A branch of the Papedies had engaged in trade at Berwick, and to one of these, Thomas Papede, the monks of Coldingham, in 1399, owed £24. In 1400 they were indebted to Thomas Papedi, in Berwick, £9 12s 9d; and in 1406 to Thomas Papedy, senior, £14; and to Thomas Papedy, junior, and his comrades, Robert Huton and Stephen Fyschewyk, both local names, 60 shillings.*

If Bishop Keith's conjecture can be confirmed that Stephen Pa or Pai, prior and afterwards Bishop-elect of St. Andrews, was a Papedy,† Fordun, the historian, has portrayed the personal appearance, and the mental and moral qualifications of one of this old race; who was certainly, if he belonged to it, its most eminent representative. The lord Thomas Bisset, Fordun says, having resigned the priorate in 1363, in his stead was elected on the feast of St. Columba, the abbot (June 9), the lord Stephen Pai, the sub-prior, a venerable man, endued with all probity of manners; who obtained the episcopal confirmation and benediction from the bishop, William Landalls. Bishop Landalls, or Landles, was the last heir male of the Landalls of Hounam; and being a borderer like his subordinate, would, the more readily, recognise his capacity. The new prior was a tall, corpulent man, with a pleasant blithesome countenance; generous and munificent in all respects, he drew to himself every one's affection. By misfortune the great church of the monastery having been casually burned in 1368, he repaired the damage it had sustained in the roofing and stone work, in the timber and lead, within the subsequent year; having expended in this reparation, including the re-edification of two columns, in the southern part of the church, near the altars of St. Michael and St. Laurence, 2,200 merks. He continued prior for twenty years, and was elected by the chapter to the bishopric of St. Andrews, on the death of William de Landalls, in 1385. Purposing to repair for confirmation to Rome, he was taken captive at sea by English pirates, and sickened and died at Alnwick, in March of the same year.‡

* Inventories and Account Rolls of Coldingham. Stephen Fyshwic was a baillie of Berwick, in 1442.—*Liber de Melros*, No. 550.

† Keith's *Scottish Bishops*, p. 17. Aldred, the son of Pae, witnesses a charter of Nes, an East Lothian retainer of the Earl of Dunbar, in time of Alexander II. *Liber de Melros*, No. 295. He was perhaps Aldred de Popple, No. 63.

‡ Fordun's *Scotichronicon*, Ed. Goodal, vol. i., pp. 370, 371, 364. Keith's *Scottish Bishops*, pp. 16, 17.

We must now revert to another scion of the family, that of Manderston. A copy of the original charter is fortunately preserved, and it affords some insight into the family history; representing John Papedy, with whom we are already acquainted, as the father; Stephen at the head of the house; providing for his brother Thomas, next to himself either in age or capacity, and an annual acknowledgment to another of the Papedies named Henry.* The deed bears to be a confirmation by Patrick, Earl of Dunbar, to Thomas Papedy, the son of John Papedy, as well as to his heirs, of Mandredeston—this place having been conferred on him by his brother Stephen, on the condition of homage and service, the service being the one-eighth part of a knight's service, and the annual payment of a silver merk to Henry Papedy, for the said Stephen and his heirs, at the feast of St. James, at the fair of "Rokexburk." In default of heirs, the land held by a similar tenure of Stephen and his heirs was to pass to the next younger brother, to Thomas and his heirs. This, Earl Patrick, then being at Dunse, testifies; likewise Waldeve, then rector of the Church of Dunbar; the lord Roger de Merley; the lord David de Graham; the lord Robert son of the earl; the lord Philip Pethcox, then seneschall of the Lord Patrick, Earl of Dunbar; the lord Alan Harkers; the lord Henry, son of Waldevey. This charter, from its witnesses, bears evidence of having been granted in the reign of Alexander II.; apparently towards the close of his rule, Philip de Petcockes having died in 1247, when he was interred with honour in the house of Melrose, to which he had been a benefactor.† The charter was authenticated and confirmed at Edinburgh, in the reign of David II., 10th Feb., 1366, shewing that there were then descendants of the family holding Manderston, in virtue of their ancestor's investiture.‡

For distinction's sake this branch appears to have adopted the name of their estate. Three of them appear on the stage at one and the same period,—John, William, and Thomas, which we may assume to be in the sequence either of seniority, or

* The payment to Henry looks like a feudal obligation, as if he was some one else than a brother, who held vested rights in the place, which this was intended to recognise.

† Chronicle of Melrose, by Stevenson, p. 204.

‡ Regist. Mag. Sigill., pp. 51, 52.

relationship, as brothers, or as father, son, and grandson ; John being the head of the house, and mentioned in a way that betokens him to have been a reliable and influential personage in the transactions of country business, at the age in which they flourished. In a writ of disseizen, by Thomas Purvas of Hundwode, of Swynwood and Ederham pledged to him for debt by John de Aclyfe, prior of Coldingham, dated at Coldingham, 24th Feb., 1410, the seal of John de Mandirston, lord or laird of that ilk, is appended along with that of Thomas Purvas. Manderston's seal bears a chevron between three popinjays, evidencing that he was of Papedy descent.* On the 20th May, 1422, at Berwick, William Drax, prior of Coldingham, lets to farm, for an annual rent of £10, Scots, to his "der frendes," John of Manderston and William of Manderston, all his lands of Eddirham, for the term of five years, "and I sall allow thaim werr of Inglyshmen as nyhtboures and others on fourhalfe about thaim."† In an indenture made at Coldingham, 15th Jan., 1425, Thomas Purvas of Swynwod acquits the prior and house of Coldingham of all debts they had contracted with him, on a payment being made to him, of 105 merks ; John of Mandriston being one of the Prior's (Drax) pledges or "boroues." William of Mandriston is there as a sanctioner ; and both the parties "has giffyn thar bodyly atthis apoun the haly euangel and to the mayr witnessing, the said Thomas has procured with grete instance the seal of John of Mandirstoune," to be placed to the deed before the witnesses present.‡ In two lengthy Melrose deeds, supplying curious information, which concern the "Depertision of Halsington," in a dispute about marches, of dates 1428, 1431, Willyam of Mandirston and John of Mandirston were on the great assize "of twenty and fyve worthy and notable persons" who made a proper division ; in the second deed John takes precedence of William.‡ A Coldingham writ narrates a perambulation of the lands of William Forman at "Kellilaw, in the Estfeylde of Coldynghame," 13th Nov., 1430 ; wherein among the "best and worthiest of the contre," who were selected as jurymen were "William of Mandyrston, John of Mandyrston, and Thom of Mandyrston ;" and the same worthy individuals acted a similar

* Coldingham Charters, in Raine's Appendix, p. 104. † Ibid.

‡ Ibid, p. 105.

‡ Liber de Melros, Nos. 525, 526.

part in a perambulation between the lands of Brokhole and Herwode on the one part, and those of Butterden on the other, 14th June, 1431.* On the 16th April, 1434, an assize was chosen at Coldingham to decide a controversy between prior William Drax, and certain free tenants of the monastery, about a right of common pasturage, in some of the priory lands, and of "usche and entre," to their own. William of Mandyrston was one of the thirteen who formed the assize. The seal of John de Manderston is annexed to the decision. He was probably either dead or no longer able to attend such conventions.†

The acquisition of Manderston by one of the Hume family is of subsequent date. According to Godscroft, the ancestor of the Humes of Manderston was Patrick, 6th son of David III., of the house of Wedderburn, and his wife Isobel Pringle of Galashiels.‡ This Sir David fell at Flodden, in 1513.

There is a flat sandstone slab in the Home aisle at Dunglass, with the inscription much defaced, that may possibly mark the last resting place of one of the old house of Manderston, which finally may have merged by inter-marriage or agreement into the family of Home. The inscription is in one long line, lengthways to the stone, and, if I mistake not, reads thus:—"THOME DE MANDERSTON EQVITIS AVRATI SPON" (the stone being broken off abruptly at the close); *i.e.*, "Of Sir Thomas de Manderston, knight, a bridegroom." Obliquely to this inscription on the left hand corner, at the head, are the broken letters TNI, and farther down, but not underneath, the solitary word VINCIT (he conquers).

From the coincidence of names we are led to inquire if this Sir Thomas de Manderston was identical with the Thom de Mandyrston of 1431. Of this there is no certainty; neither can we penetrate the mystery enveloping the close of his life; nor whether he was the last of the Papeday family. That he should be laid here, seems to imply kinship with the founders or benefactors of this church. The import of the fragmentary words is dubious; it may be the Christian triumph to which allusion is made, or it may be merely the frail tenure of human life that is bewailed. Like the story of the family the detail is broken, and cannot in all points be coherently pieced together.

* Cold. Charters, p. 110.

† Ibid, p. 63.

‡ De Familia Humia, &c., p. 19.

A Gawin de Mandirston was in 1479 forfeited in life and lands, along with a number of other Mersemen, for treasonably aiding the Duke of Albany in the defence of Dunbar Castle against James III. (Act. Parl. Scot. ii., p. 125). Carr, in his Hist. of Coldingham, p. 161, concluded that he was a Gavin Home; but this is doubtful; for in a subsequent summons relative to the same series of events, those of the Hume surname are specified in full as well as by the title: *e.g.* George Hume de Wethirburne, Patrick Hume de Polwort (p. 128). In 1481, Archibald Mandirstone was commissary for Berwick in Parliament (pp. 133, 134). Others of the name occur in that reign (l.c.).

Report of the Experimental Committee of the Tweed Commission, 1878.

I have the honour to report that the Experimental Committee had four meetings since September, 1877, viz.:—

At Cove Sands on 11th October, 1877, when 35 Blacktails were caught in the river with a net, marked with a silver wire, upon which a number is stamped, each wire being inserted in the fish's tail so as to give as little pain as possible. The fish were returned alive to the river.

At Union Bridge on 7th November, 1877, to catch and mark fish, when 61 Blacktails and 1 Whitling were captured, marked, and returned to the river.

At Carham Pond on 23rd April, 1878, to examine the fish placed therein in May, 1874. A net was used, and 66 fish were caught in the pond, and, after each had been carefully measured, the whole were returned to the pond without injury.

The 66 fish measured $964\frac{1}{2}$ inches, or on an average $14\frac{3}{4}$ inches each; the largest fish measured $20\frac{1}{2}$ inches in length. The fish had on an average increased in length $\frac{3}{4}$ inch each since they were examined on 17th May, 1877.

The fish were healthy, and, as stated in a previous Report, some were killed and sent for examination.

The last meeting was held at Carham Pond on 25th July, to see the pond cleaned and examine all the fish it contained. Sixty-four fish were taken out. They measured $965\frac{1}{2}$ inches, the length of each fish being on an average 15 inches, showing an increase in the growth of $\frac{1}{4}$ inch on each fish since the 23rd April previous.

They were not in such good condition as when examined in April last.

A number of small fish were found in the pond. They were transferred to the small pond which adjoins the large one.

Since September, 1877, five of the Blacktails marked in October and November of that year have been captured. Details regarding them are given in a Return annexed.

The three fish marked respectively 112, 307, and 325 were sent to me with the wires in them; the other two I did not see, the wires only having been sent.

It will be observed that the two fish caught in the river in March and April, as stated in the Return, had decreased in weight. A similar decrease in weight of marked Blacktails which had remained in the river, and apparently had not gone to sea after being marked, is mentioned in previous reports by the Experimental Committee.

The three fish Nos. 126, 355, and 325 recaptured, as stated in the Return, show a large increase in weight.

Reported by

G. H. LIST, Chief-Constable.

County Police Office, Dunse, 19th August, 1878.

RETURN OF FISH CAUGHT IN THE RIVER TWEED, WHICH WERE MARKED AND RETURNED ALIVE TO
THE RIVER, AND WERE AFTERWARDS RECAPTURED.

No.	SPECIES OF FISH.	Date of Marking.	Where Marked.	Weight.	Length in inches.	Species of Fish when Re-captured.	Date of Re- capture.	Where taken.	Weight.	Length in Inches.	Difference in Weight.	Difference in Length.	Interval between Marking and Re-capture.
122	Black Tail.	1877. Oct. 11.	Cove Sands.	10½ oz.	12	Black Tail.	1878. March 26	Finchey.	5 oz.	10½	Decrease. 5½ oz.	Decrease. 1½ inches.	166 Days.
307	Do.	Nov. 7.	Start.	11½ "	13	Do.	April 20.	Yarrow.	10 "	13½	1½ " Increase.	½ inch.	164 "
126	Do.	Oct. 11.	Cove Sands.	8 "	11	Sea Trout.	July 3.	Tynningham*	24 "	16	16 oz.	5 inches.	265 "
355	Do.	Nov. 7.	Start.	9 "	11½	Do.	" 23.	Gosford.*	36 "	+	27 "	—	258 "
325	Do.	Do.	Do.	14½ "	14	Do.	Aug. 17.	Outwater Stell	28 "	16½	13½ "	2½ inches.	283 "

* Tynningham and Gosford are in Haddingtonshire.

† Length not taken.

Localities for some rare Berwickshire Plants, with other Remarks. By JOHN ANDERSON, Preston.

PLANTS.

- ERODIUM CICUTARIUM. On some steep sandy banks at Primrose-hill.
- SELIGERIA RECURVATA. On a small piece of red sandstone opposite Cockburn Mill.
- DICRANUM SPURIUM. A single tuft on an earth-capped dike between Preston and Hoardweil.
- CRISpum ET D. RUFESCENS. On wet rocks of Old Red Sandstone on the side of Lintlaw-burn.
- POTTIA MINUTULA. On clay fields, Preston.
- DIDYMODON FLEXIFOLIUS. On an earth-capped dike, Hoardweil; and in the woods at Brockholes on a black soil.
- GRIMMIA DONIANA. Tufts of this moss are to be found here and there on most of the old dikes on Preston, Lintlaw, and Hoardweil.
- TETRAPHIS PELLUCIDA. On rotten oak stumps, in the old Brockholes wood, opposite Renton House.
- BRYUM ALPINUM. On the side of an old track where a sheet of ice lies the most of the winter, Drakemire Moor.
- BRYUM STELLARE. On rocks; Hoardweil and near Cumledge House.
- ANOMODON VITICULOSUS. A single patch which does not appear ever to get much larger, on rocks above Preston-bridge; and in greater plenty above Cockburn Mill, in company with *Zygodon viridissimus*.
- HYPNUM PUMILUM. Damp rocks covered with a sort of red clay, Cockburn Mill.
- MURALE. On loose tumbling stones lying among wet mud, Cockburn Mill.
- IRRIGUUM. On stones in most of our burns.
- OCHRACEUM. On rocks at the side of the Whitadder, below Edin's Hold.
- SILESIAcUM. A single piece of this moss was gathered by Mr Robert Patterson, Dunse, somewhere in the Dunse Castle woods, and was verified by the Rev. John Fergusson. It has been repeatedly sought for since, but not to any purpose.

HYPNUM HETEROPTERUM. On damp rocks at Edin's Hold, Brockholes wood, Hoardweil, and Dunse Castle.

CRYPHÆA HETEROMALLA. I know of only one station for this moss here now. The old willows on which it grew have been cut down. The station for *Leucodon sciuroides* at Marygold has also been destroyed.

MISCELLANEA.

GOLDFINCH (*Carduelis elegans*).—Three Goldfinches were seen in October, on the hill above Preston.

SQUIRRELS EATING FUNGI.—I have been watching the Squirrels to find out if they really eat Fungi. One day I had a fine view of one actually at this occupation. It was sitting on the ground with a sort of grey-coloured fungus, which it was busy eating. Something gave it a start, when it took up the nearest tree, and finished its meal, and afterwards dropped the stalk, which was all it had left. I saw another of the same kind of fungus laid in the fork of a branch, the half of which was eaten, but I have not seen any of the beautiful red ones, that were stuck in similar situations, with pieces bitten out of them.

[On this habit, Mr J. A. Harvie Brown remarks in a letter: "I have learned that Squirrels also gnaw the small fungi on trees, which cover the bark. The stalks of fungi appear to be usually chosen by the Squirrels for nibbling."—J. H.]

Ornithological Notes. By GEORGE BOLAM, Berwick-on-Tweed.

SHORT-EARED OWL (*Strix Brachyotus*).—This owl occasionally breeds on Whitsun-bank, where I have taken its nest placed amongst the heather.

RAVEN (*Corvus Corax*).—In March, 1878, I saw a raven near Marshal Meadows, soaring over the cliffs on the sea shore; whilst I was watching it another came flying past me, and the two went off together in a southerly direction.

HOODED CROW (*Corvus Cornix*).—On the 14th April, 1877, I took a nest of this species containing five eggs, in a small plantation near Skirlnaked, about 3 miles from Wooler; it was placed like that of the Carrion Crow, near the top of a Scotch fir and the eggs were very much incubated. The bird was on the nest when found and after being disturbed flew about in company with some carrion crows, several of which had nests in the same plantation, but as only one "Hoodie" was seen, it is possible it may have had a black mate and not one of its own colour.

Quite lately I saw near Berwick a crow with a patch of grey "hoodie" colour on the back between the wings, the remainder of its plumage being quite black. Though varieties of this description are according to Mr Hancock not uncommon in the North of Scotland, where the hooded crows breed in considerable numbers, they do not appear to be of common occurrence in this district.

ROSE-COLOURED PASTOR (*Pastor roseus*).—One was found in a garden near Ancroft, in a disabled state, in August, 1877, and is now preserved in the Berwick Museum.

TREE SPARROW (*Fringilla montana*).—Quite common here all the year round, breeding in holes in the town walls and other convenient places. It seems to be the general opinion that it is a scarce bird, so far at least as Berwickshire and Northumberland are concerned. It breeds, however, at various places along the coast between Berwick and St Abb's Head, and when at the latter place in June of last year, I saw several pairs and found at least three nests, all of which had young; and I also observed several birds at Reston Station. At Ancroft and at Scremerston too it is found frequenting most of the old quarries and lime kilns. We considered it rare at Weetwood, where I have seen only

a single specimen, but as that was killed in May or June, it would probably be nesting there. All the nests I have seen were either in crevices in the rocks or stone-work, or in holes in the banks like Sandmartins. The two species, the Common and the Tree, often breed close to one another. The difference between the two is easily distinguished, the former being larger and considerably tamer than the latter, which is to look at more like a Redpole, (but of course larger); there is too a good deal of difference in their notes.

GOLDFINCH (*Fringilla Carduelis*).—A pair of these, now comparatively rare, birds frequented a small plantation near Kimberston, during the winter of 1877; they disappeared about the beginning of March, 1878.

SISKIN (*Fringilla Spinus*).—On the 13th April, 1877, I came upon a flock of some fifty or sixty of these lively birds in a small plantation near Langleyford. They are not uncommon in that locality during the winter months, seeming to prefer the low alder trees, growing on the hill sides, to almost any other kind of wood.

TWITE (*Fringilla Montium*).—I found a nest of this species on the sea banks south of Spittal, on the 23rd of May, 1877; it contained only one egg and was built in a clump of heather, three or four inches above the ground. Fearing lest it should be destroyed by some of the numerous passers by, I took the egg, and of course no more were laid. Though these birds are common enough in winter, this is the first time I have seen the nest in the district. Mr Hancock, however, in his "Birds of Northumberland and Durham" says "they are not uncommon, breeding on the heather in the wild and uncultivated parts of both counties."

YELLOW WAGTAIL (*Motacilla flava*).—I saw one of these birds in a marshy field near Goswick, in June, 1878; it was by no means shy, and several times allowed me to approach quite close to it, though it did not seem to be nesting there.

PIED FLYCATCHER (*Muscicapa atricapilla*).—There was a nest of this species near to Weetwood Hall, in the summer of 187—, placed in a tree-root, standing on a very steep bank near the river; it contained, when found, 4 young ones about half grown, and an addled egg.

QUAIL (*Coturnix vulgaris*).—A couple of Quails were exhibited

for sale in a game-shop in Berwick, in September last. They were said to have been killed near Unthank, and were quite young birds, evidently bred not far from the place at which they were shot.

GREY PLOVER (*Pluvialis varius*).—Frequent along the coast during autumn and winter, generally seen in small parties of three or four.

RING-DOTTEREL (*Charadrius Hiaticula*).—Breeds on the gravelly beach at Cheswick and Goswick, where I have taken the nest.

GREENSHANK (*Totanus griseus*).—Not uncommon on the slakes at Holy Island during the autumn, and occasionally remaining there for the winter.

REDSHANK (*Totanus Calidris*).—Breeds in considerable numbers on wet fields upon Goswick farm, the earliest nests being about the end of April.

WATER-RAIL (*Rallus aquaticus*).—By no means rare on the banks of the Tweed, near Berwick, and occasionally to be seen exposed for sale in the game-shops. These birds seem to remain in pairs throughout the winter.

SPOTTED CRAKE (*Crex porzana*).—Mr Robert Brown, of Gainslaw, kindly gave me a specimen of this bird, which he had shot there on the 11th October, 1878.

SHELLDRAKE (*Anas Tadorna*).—Is still found breeding in rabbit-holes upon the mainland opposite Holy Island. Shelldrakes are also occasionally met with on the slakes at Fenham, and Holy Island, during winter.

GLAUCOUS GULL (*Larus glaucus*).—Is common on the coast during winter in the immature state. A fine specimen in full mature winter plumage was obtained in December last, near the mouth of the Tweed, and is now preserved in the Berwick Museum.

BLACK TERN (*Sterna fissipes*).—On 9th October, 1878, I shot a specimen of this Tern in the harbour here. It was, in company with some Black-headed Gulls, picking up the refuse floating from the boats at the quay; and proved on examination to be a male in immature plumage; weighing a little over 2 oz. avoird., and measuring from tip to tip of wings one foot ten inches.

LESSER TERN (*Sterna minuta*).—One was obtained near Ancroft, in August, 1877, and is now in the Berwick Museum.

LITTLE AUK (*Mergulus Alle*).—Was very abundant on our

coast in December last, while the stormy weather lasted; and numerous notices of its capture were recorded in the local newspapers; at least two examples were picked up in an exhausted state in the streets of Berwick.

There have been extraordinary numbers of wild fowl in the neighbourhood this winter, but not many rare ones have been procured. At Holy Island last December, as many as 12 couple of Woodcocks, and a great many Snipes were, I heard, obtained by one man in a single day; while numbers of both these birds were always to be seen in the game-shops here. Wild Ducks and Wigeons, too, were very plentiful; while lately there have been a great many Brent Geese shot on the "slakes" near Holy Island. Pochards and Scaup Ducks have also occurred in considerable numbers. I obtained two very good examples of the latter in November, and a Pink-footed Goose in October. A few Long-tailed Ducks have also been shot in the neighbourhood.

Berwick-on-Tweed, 10th Feb., 1879.

Ornithological Notes. By ROBERT GRAY, F.R.S.E., F.S.A., Scot.

TAWNY OWL (*Syrnium stridula*).—Since my last note on this species I have had corroborative testimony from several observers regarding its increase in the Eastern Counties of Scotland during the winter months, and I have come to the conclusion that the accession to its numbers is due to the arrival of migratory flocks from Northern latitudes. During the present winter I have examined upwards of twenty specimens all in the clear grey plumage which, I believe, distinguishes these migrants. I have also seen not a few in the plumage of the first year.

GRASSHOPPER WARBLER (*Salicaria locustella*).—A male Grasshopper Warbler was shot by Mr William Evans, within two miles to the south of Edinburgh, on 29th May, 1878.

WAXWING (*Bombycilla garrula*).—A female was killed at Broxburn, Linlithgowshire, on 3rd December, 1878. It had perched on a hedge by the roadside and attracted the curiosity of a

passing miner, who lifted a stone and felled the poor wanderer to the ground.

SNOW BUNTING (*Plectrophanes nivalis*).—A female in breeding plumage was shot at Leith, on 24th May, 1878. This is, so far as I am aware, the latest recorded stay of the Snow Bunting in any part of the Lothians.

KINGFISHER (*Alcedo ispida*).—About twenty specimens of this beautiful bird were obtained in the neighbourhood of Edinburgh, in the course of six weeks during the present winter.

STOCKDOVE (*Columba ænas*).—A beautiful male bird of this species was sent to me on the 12th March of the present year, by Charles Watson, Esq., solicitor, Dunse. It had been shot on the previous day in the woods of Dunse Castle, Berwickshire, out of a flock of more than a dozen. Mr Watson informs me that those birds had all left the woods in question at the commencement of the storm early in December, and had only returned a week before this specimen was obtained. The bird was in good condition and its stomach contained a single bean and a few grains of rape seed.

CAPERCAILLIE (*Tetrao urogallus*).—Judging from various records that have reached me the Capercaillie has now obtained a permanent hold in Fifeshire. I heard of an instance of a nest of this bird having been found in a very unusual situation early in August last year, viz. :—in the old nest of a hawk, built in a pine tree, in a wood near Falkland in that county. There were ten eggs in the nest.

GREENSHANK (*Totanus glottis*).—Has been tolerably numerous along the shores of the Forth during the present winter, ascending as far as Kinrosshire, three fine specimens having been obtained from that part of the county which verges upon the river.

KNOT (*Tringa canutus*).—Knots appear to have arrived on our coasts much earlier than usual last autumn, and many birds reached us in full breeding dress. In a note from my friend, Mr J. A. Harvie Brown, dated 4th September, he writes :—“On the 30th August, I saw a Knot at Grangemouth, with remains of the actual summer plumage, part of the breast being of a deep chestnut. It is the first I have ever met with out of hundreds I have shot, and thousands I have seen, which retained traces of the summer plumage. Many, of course, have the buff breast, and I take these to be the young of the year.” In the same letter, Mr Harvie Brown informs me that he saw flocks of Knots on that

occasion; also Sanderlings and Curlew Sandpipers. I examined a very beautiful Knot in full breeding plumage, which was shot on the coast near Girvan, Ayrshire, in the last week of July; and in connection with this subject, I may mention that I found all the Dunlins, which were in flocks on the same part of the coast, in complete summer plumage also. These, however, were probably natives of the county, as the Dunlin is known to breed in Ayrshire.

WATER RAIL (*Rallus aquaticus*).—Has been very plentiful in the Lothians during November, December, and January. Fifteen specimens were sent in from various quarters to one of the City taxidermists.

BRENT GOOSE (*Anser torquatus*).—Throughout the months of January and February of the present year, the Brent Goose has been unusually plentiful in the Firths of Forth and Tay. The specimens which I have examined both in Edinburgh and Dundee shew but little variety, and they all appeared to be birds in excellent condition. It would appear to have fared differently with the

PINK-FOOTED GOOSE (*Anser brachyrhynchus*), several specimens of which, from the same localities, came under my observation. These were in a state of great emaciation, a circumstance probably due to the difference in their food and habits.

WHITE-FRONTED GOOSE (*Anser albifrons*).—Several specimens of this goose were shot along the Haddington coasts in November and December, and on the Forth near Kincardine. The head-quarters of the bird in Scotland may be said to be the Island of Islay. I have a beautiful specimen in my collection from that quarter, which was presented to me by Mr R. Scott Skirving, and I have been informed by that gentleman that in the beginning of November last he killed eight of these birds at one shot. Three of these I had an opportunity of examining.

EGYPTIAN GOOSE (*Anser Egyptianus*).—One was shot in Selkirkshire on 10th December, and another on St. Mary's Loch, on 24th December. A third was shot on the 7th February, on the shore between Granton and Cramond. None of these birds shewed any traces of having been kept in confinement.

GADWALL (*Anas strepera*).—A male was shot on Loch Leven, Fifeshire, in the last week of December, 1878. Another—a young male—was shot on the Forth, near Kincardine, on the 14th March, 1879. This duck is either very rare along the

eastern coast of Scotland, or has been overlooked. Of late years it has been found on the Island of Tyree, in some numbers. I had previously recorded it from the Island of Benbecula, one of the outer Hebrides.

SHOVELER (*Anas clypeata*).—A pair were shot near Jedburgh, in May, 1878, by Mr Adam Elliot, Scremerston. The male was killed on the 6th, and the female on the 11th of the month. I am indebted to Mr Sanderson, for permission to examine both birds, and have been informed that an egg almost ready for extrusion was taken from the ovary of the female. From this it may be inferred that the birds would have bred near the pond where they were taken.

PINTAIL DUCK (*Dafila acuta*).—Two male specimens of this handsome duck were shot at Bowhill, Selkirkshire, in the last week of February. The head and neck of both were sent to Mr W. Hope, taxidermist, Edinburgh, who kindly brought them under my notice. A third, also a male, was shot at the same place, on the 14th March.

COMMON SCOTER (*Oidemia nigra*) and VELVET SCOTER (*Oidemia fusca*).—With reference to my notice of Common and Velvet Scoters having occurred in Scotland during the summer of 1876 (B.N.C. Pro. viii., p. 75), the following note relating to these two species has been obligingly sent me by Mr T. H. Nelson, Coat-ham, Redcar:—"In the spring of 1877, after the main body of Scoters had left for the North, there still remained on the sea, east of Redcar, a small company of Common Scoters, about 40 in number, and four Velvet Scoters also were observed in the vicinity of the other ducks. I was away from here until the end of June, with the exception of a few days in May, when I saw the birds on the sea about a mile east of Redcar. I saw them again in June, throughout July, and part of August; and on the 12th of that month shot one of the Common Scoters—an old male. The Velvet Scoters did not associate with the other ducks, but remained two or three hundred yards distant from them. They were seen at all hours of the day from day-break till dusk, and were never seen to leave the water. They all disappeared about the end of August, and would probably return in the autumn with the main body."

GREAT CRESTED GREBE (*Podiceps cristatus*).—A fine specimen of this Grebe was shot at North Berwick, in the second week of

January, and another at Portobello in the last week of February of the present year. Both appeared to be birds of the first year.

RED-NECKED GREBE (*Podiceps rubricollis*).—A beautifully marked specimen of this Grebe was shot at Coldingham, on the 14th February, 1879. The grey cheeks, dark occipital tufts and rich brown of the neck are all clearly defined in this specimen.

SCLAVONIAN GREBE (*Podiceps cornutus*).—A specimen of this Grebe, which appears to be the least common species of the genus in Scotland, was found dead upon the shore near Dirleton, early in March.

BLACK-THROATED DIVER (*Colymbus arcticus*).—Numerous specimens of the Black-throated Diver have been procured during the present winter, from the Firth of Forth, and also from one or two inland Lochs. As the season progresses the birds shew indications of a change to summer plumage—those obtained in March being very different from the specimens taken two months previously.

LITTLE AUK (*Mergulus Alle*).—Along the shore from Coldingham to Queensferry, the Little Auk has been more than usually numerous since October last. Many birds appeared to have gone up the Firth a considerable distance, and one at least was captured in Kinrosshire. The same may be said of its visit to the Tay estuary, where a number of Little Auks were seen nearly as far as Perth. Several specimens were caught in the streets of Dundee.

MANX SHEARWATER (*Puffinus Anglorum*).—Within the past three years, I have observed that this bird comes to the Firth of Forth in considerable numbers. They appear to remain sometime in the Firth, from four to six weeks, and are, no doubt, on their way southwards, when arrested by the shelter and suitable feeding grounds which the estuary affords. On 17th August, 1878, two specimens (male and female) were shot off North Berwick, and on 28th of the same month, I examined other three (two males and 1 female) which were obtained from the same place. I had previously seen large flocks of Shearwaters between Aberlady Bay and the Bass Rock.

GREATER SHEARWATER (*Puffinus major*).—Although I had several times observed one or two Greater Shearwaters in a flock of the common species, near the Bass Rock, I have only had an opportunity of examining one specimen, namely a young male, that was shot off North Berwick, on 28th August, 1878.

Additional Notes on Birds in the neighbourhood of Paxton.
By GEORGE MUIRHEAD.

ROUGH-LEGGED BUZZARD (*Buteo lagopus*).—Major Campbell Renton, of Mordington, has kindly informed me that his game-keeper saw a Rough-legged Buzzard on Lamberton Moor, during the severe snowstorm in the month of December last. The bird was sitting on a thorn tree, and allowed the keeper to approach within 60 or 70 yards of it before it flew away. The keeper observed that it had a good deal of yellowish white about the plumage. Mr Mein, Lamberton, has been good enough to give me some further information regarding the bird. It frequented Lamberton Moor for about a fortnight after the snow-storm came on in December, and it sometimes came to the stackyard at Lamberton Shiels and sat on the stacks, evidently for the purpose of catching mice or rats. It was frequently seen about Mordington, and went by the name of "The Eagle," as it looked very large when on the wing. It used, sometimes, to be seen frequenting the "Lang Belt" Plantation, on Mordington Mains Farm.

PIED FLYCATCHER (*Muscicapa atricapilla*).—A male Pied Flycatcher was observed here near the Avenue Bridge, on 12th May, 1877. I find, on referring to my previous notes, that I observed one at Finchy, about the second week of May, 1872. It is a very rare visitor to Paxton.

MISSSEL THRUSH (*Turdus viscivorus*).—During the long continuance of the recent unusually severe weather in December and January, several Missel Thrushes, which are generally very wild and shy, came, along with Common Thrushes, Red Wings, Fieldfares, Blackbirds, House Sparrows, Hedge Sparrows, Redbreasts, and Titmice of several kinds, to a window-sill in Paxton House, and fed eagerly on crumbs of bread and meat, which were put out for them by the ladies every morning. The Missel Thrushes, Redwings, and Fieldfares were so tamed by the severity of the weather that they fed while people stood inside the window looking at them.

CHIFF-CHAFF (*Sylvia hippolais*).—My attention was attracted while I was on my way from the garden, here, to my cottage, on 22nd May last, about noon, by the peculiar note of a small bird, proceeding from the top of a high elm tree, near the Avenue

Bridge. After watching for sometime, I had the satisfaction of seeing the bird come out from the middle of the tree and alight on a branch close to where I stood, and discovered that it was a Chiff-chaff. I had not previously heard or seen this bird at Paxton, but a friend of mine, Mr Arthur H. Evans, of Cambridge, who is well acquainted with birds, while staying with me here a short time previous to the above date, heard, one morning, the Chiff-chaff's note in the Old Heronry Wood, in the Policy. I heard another Chiff-chaff here a week or two later, and am inclined to think that it would have its nest in the Policy woods.

MEADOW PIPIT (*Anthus pratensis*).—When I was curling at Foulden Curling Pond one day, about the middle of December last, a Meadow Pipit came into the house in which the curling stones are kept. It was so weak that it could not fly.

SKYLARK (*Alda arvensis*).—The Skylark is by no means plentiful about Paxton. On 29th January last, I saw large flocks of Skylarks on the fields of Lamberton Farm, near the seaside. They had frequented the fields there during the stormy weather in December and January, as the ground was nearly clear of snow there, owing to its being close to the sea.

COMMON BUNTING (*Emberiza miliaria*).—This bird seems to have favourite localities. I generally see it on the hedges at the side of the road between the National School and the drinking trough on the Berwick road. I saw several on 29th January near Lamberton Toll. We never see it in this immediate locality.

CHAFFINCH (*Fringilla cœlebs*).—Most of our Chaffinches disappeared when the storm came on in December last, and during its continuance few were seen. I think they went to the neighbourhood of the sea, where the snow did not lie.

BRAMBLING (*Fringilla montifringilla*).—Not a single Mountain-finch has been seen here this winter. In 1876 they were very numerous, but I saw only a few in the winter of 1877.

GREENFINCH (*Coccothraustes Chloris*).—This bird has been very plentiful in the stackyards here, all through the late stormy weather.

BULLFINCH (*Pyrrhula vulgaris*).—Great numbers of Bullfinches have been caught during the snow, this winter, by bird fanciers in the neighbourhood. They took them by means of trap-cages and a call-bird.

STARLING (*Sturnus vulgaris*).—Immense numbers of Starlings

roosted in the evergreens about Mordington House, last autumn. When the birds were disturbed they rose in thousands from the bushes. I saw large flocks of Starlings on the fields by the side of the sea on Lamberton Farm, in the end of January. They had gone there evidently on account of the ground being clear of snow, from its proximity to the sea coast.

RAVEN (*Corvus Corax*).—Major Campbell Renton of Mordington, Mr Mein of Lamberton, and I, saw a fine specimen of this bird on Lamberton Moor, on 29th January last, during the recent very severe weather. It was frequenting a field where sheep were feeding, and did not appear to be shy, for it several times alighted on a stone dyke by the road side, not above fifty yards in advance. Its hoarse croaking struck me as in keeping with the stormy state of the weather, and the loneliness of the moor. The gamekeeper at Mordington lately informed me that he had, last year, trapped a Raven on the estates. I observe that Mr Harting, in his "Ornithology of Shakespeare," says, regarding the Raven, "From the earliest times the Raven with his deep and solemn voice, has always commanded attention, and superstitious people have become impressed with the idea that there is something unearthly in his nature, and ominous in his voice." Shakespeare frequently alludes to the "ill-boding Raven." Dr Turnbull, in his "Birds of East Lothian," says it is "rather rare on the Lammermuirs, and is also occasionally met with on the sea coast." I have never seen the Raven in East Lothian.

GREAT SPOTTED WOODPECKER (*Picus major*). A beautiful female was shot at Quixwood, about the beginning of this month (February, 1879). I saw the bird before it was preserved. It is now in the possession of Mr Hogg, of Quixwood.

NIGHT JAR (*Caprimulgus Europæus*).—When I was walking round the green walk at the west side of Paxton Policy, on the morning of Sunday, 19th May last, a Night Jar, which had been sitting on the low sunk wall by the side of the walk, flew up, and alighted on a thick branch of one of the trees in the adjoining plantation, where it sat for sometime, and then flew off into the wood. I am well acquainted with the habits of the Night Jar, having had very frequent opportunities of seeing the bird in the summer evenings, when I lived in Glen-Urquhart, Inverness-shire, and have two of its eggs in my collection, which were found amongst some ferns in the glen.

RING-DOVE (*Columba Palumbus*).—Few Wood-pigeons have been seen about Paxton during the past winter. I saw vast flocks on the turnip fields near Dunbar, one day, during the snow storm, in January last.

BLACK GROUSE (*Tetrao Tetrix*).—Major Campbell Renton, of Mordington, lately told me that Black Grouse used to frequent Lamberton Moor, not very long ago, and that a Grey-hen was shot near Mordington House, 8 or 9 years ago. On referring to the account of the Parish of Mordington, by the Rev. George Fulton Knight, parish minister, written in 1835, for the "New Statistical Account of Scotland," I find it stated that "the common kinds of game, as hare, partridge, *blackcocks*, dotterel, and woodcock, are plentiful." Hence, Black game about 40 years ago, must have been numerous on the moor.

RED GROUSE (*Lagopus Scoticus*).—Five Grouse were seen on Lamberton Moor during the late severe snow storm. Major Campbell Renton informs me that, about five years ago, a Grouse's nest, with 8 or 9 eggs, was found on a part of the moor where the heather is long; and that, unfortunately, the bird was killed on the nest by a fox, and since that time no Grouse have been seen on the moor, until the five above mentioned were observed. I have no doubt that, long ago, Grouse were plentiful on the moor. 22nd February, 1879, the gamekeeper at Mordington tells me that there are six Grouse on the moor at present. He thinks that they must have come from Coldingham Moor.

PARTRIDGE (*Perdix cinerea*).—Partridges suffered very much from the wet summer of 1877; indeed, only about two or three broods survived on the estate of Paxton. The great severity of the weather in December and January last, must have been very trying for the Partridges, and, I fear, that they will not be plentiful next shooting season. 22nd February, 1879. The gamekeeper at Mordington mentioned to me to-day that he had seen several Partridges dead amongst the snow, during the storm in December and January.

QUAIL (*Coturnix vulgaris*).—John Hakin, residing at Billylaw, near Berwick, informed me, sometime ago, that he had shot a Quail, near Heatherytops, in January, 1877.

COMMON DOTTEREL (*Charadrius morinellus*).—Major Campbell Renton, of Mordington, has been so kind as to supply me with the undernoted information, regarding this now very rare bird

visiting Lamberton Moor, on his estate. Small flocks, consisting of about seven or eight, occasionally alight upon the Moor, between the 12th and the 20th of May. The last flock was seen two or three years ago, near the Church Road, which leads across the Moor. On 12th May, 1868, six Dotterels were shot on Lamberton Moor out of a flock of seven, and on the 9th May, 1872, seven others were killed there. I find, on referring to the "Old Statistical Account of Scotland," written in 1795, that the Rev. George M. Drummond, then minister of the parish of Mordington, says, with regard to this bird:—"On the higher grounds in this parish, Dotterels are supposed to appear sooner than in any parts of the South of Scotland." One of the best accounts of the Dotterel's breeding habits that I have read is given in the 4th vol. of "McGillivray's British Birds." Mr John Colquhoun, in his "Sporting Days," gives a very interesting description of an expedition which he made to procure specimens of the Dotterel, near Dunglass. He says—"Even in the palmy days of Pennant samples of the Dotterel killed in Britain were not very attainable, as the following anecdote, told me by an English clergyman, will serve to show. While spending the winter at Great Malvern, six years ago, this gentleman, being one of the Directors of the Museum, was showing me the collection, I took occasion to ask him if there were any Dotterels in the neighbourhood, as I had been trying for years to shoot one, but had never yet seen a single specimen in its wild state. 'When I was a young man,' said he, 'Pennant made me the same complaint, and suggested that in place of being called *common*, the bird deserved the title of *uncommon* Dotterel.' " Mr Colquhoun states that "the usual time of its arrival in the neighbourhood of Dunglass,* is from the 9th to the 14th of May, and they remain about ten days or a fortnight on their first ground before separating for the higher breeding places. They come to this country in 'trips' of from five or six to a dozen, and pitch on undulating downs or hillocks near the sea. Rough grass and heather has less attraction for the bird than thin fallow fields. But the most favourite feeding ground of all is a newly broken up and sown down field of old lea, where they seem to find the most abundant supply." The gamekeeper at Foulden has informed me that about 17 or 18 years ago, he used to see great flocks of Dotterels, about the

[* On Redheugh farm, five miles from Dunglass,—J. H.]

middle of May, on the newly sown down fields near the Pit Houses, adjoining Lamberton Moor; and that, with the permission of the proprietor of Mordington estate, he used frequently to go to shoot them. They used to come to these fields about the 12th of May, and leave after staying about a fortnight. They were so plentiful that, on the 26th May, about 18 years ago, he shot no fewer than 15 brace. They allowed him at the first to get quite near to them when they were sitting in a flock, but after they had been shot at several times, they turned very wild, and would not let him within shooting range, and he had to stalk them behind dykes, &c., to get a shot at them. He has never seen them later in any year than 26th May. He sometimes shot 30 brace during their stay. The last time Dotterels were seen in the fields near Lamberton Moor, was about the middle of May, 1876, when a few came there and stayed for two or three days. He has heard an old dyker say that, long ago, between 50 and 60 years since, Dotterels used to visit the high lying grounds on Foulden estate, adjoining Lamberton Moor; and an old man, named Park, who lived in Horncliffe, used to be engaged to shoot them for the table of the proprietor of Foulden.

GREEN SANDPIPER (*Totanus ochropus*).—One morning, about the middle of September, 1877, the gamekeeper at Paxton House, while walking through the Wester Grass Park, in the Policy, heard a shrill whistle above his head, and on looking up, saw two birds, like Snipes, flying rapidly towards the Tweed, at a considerable height in the air. He fired at them, and one fell, which he brought to me, and I found it to be a beautiful specimen of the Green Sandpiper. It is now in my collection.

WOODCOCK (*Scolopax rusticola*).—Since the storm of snow and severe frost came on in the beginning of December, no Woodcocks have been seen in the woods here. During the severe weather in 1874, they were often found at the sides of the burns and in the moist places in the plantations on Paxton estate; and in the month of December, that year, I shot no fewer than sixteen.

LANDRAIL (*Crex pratensis*).—The Landrail has been somewhat scarce in this locality, for the last year or two. I do not remember of hearing one cry in 1877 at all, and last year I heard only one or two the whole season.

TEAL (*Anas crecca*).—A large flock of Teals, 30 or 40 in

number, frequented the pond at Wedderburn North Lodge, in the months of December and January last; but, as the frost continued so long, the pond was frozen over, and the Teals left.

POCHARD (*Fuligula ferina*).—Several Pochards have been shot during the past winter, on the Tweed, below Finchy. Owing to the river here having been frozen completely across, during the hard weather in December and January, we have had no Ducks on the Paxton Water.

GOOSANDER (*Mergus merganser*).—Several Goosanders have been shot recently on the Whiteadder. Two were killed on Spital estate, one of which, Mr Compton Lundie, of Spital, kindly showed to me. It was a male in immature plumage.

18th February, 1879.

On the Occurrence of the Vaagmaer, or Deal Fish (*Gymnetrus arcticus*) at Spittal. By GEORGE BOLAM, Berwick-on-Tweed.

ON the 26th March, 1879, a very rare fish (the Vaagmaer—*Gymnetrus arcticus* of Yarrell) was picked up on the beach at Spittal, and found its way into a fishmonger's shop in Berwick, where I saw it on the 27th. Like most of the specimens which have, as yet, been obtained, this example was in a very mutilated condition; the head and shoulders being almost entirely wanting, and the fins and tail very much broken. It measured in length about 4 feet; its depth was $7\frac{1}{2}$ inches (not including the back fin, which was about an inch high); and it was not more than an inch or an inch and a half in thickness in the thickest part of its body, while the edges were not much thicker than paper. A part of the mouth, which was still visible among the fragments of the head, almost exactly resembled that of a herring, but was, of course, larger. The whole fish looked as if it had come from the stomach of some larger fish; and as if the head and shoulders had been partly digested. Owing to its unsatisfactory condition it was not attempted to preserve it.

[Mr Bolam transmitted a pencilled outline of the form of the fish. It is new to the Border Fauna].

The Cultivation of Linnæa borealis and Goodyera repens.
By Dr. CHARLES STUART, Chirnside.

ALL persons who have a rock-garden, find certain plants difficult to keep alive, for any length of time. *Linnæa borealis* and *Goodyera repens*, under ordinary management, are very troublesome in this respect, whatever peaty mixture we choose to grow them in. Personally, I have experienced this difficulty with *Linnæa*, which induced me last summer, when botanizing at Mellerstane Woods, to pay particular attention to the sort of soil and situation wherein it flourishes. On examination, I found its silky roots to derive their entire nourishment from the decayed remains of the Scotch Firs, and other vegetable matters, which have been gradually deposited in the course of ages, among the mosses; and there is no trace of soil of any kind whatever, near the roots, to be seen. The *Goodyera* has also its creeping roots comfortably established among the mosses, and vegetable debris, never, as far as I have observed, among the soil. Taking a leaf out of Nature's book, I began to think I should like to try to grow these plants in a similar mixture. With plenty of rooted specimens, I brought home some of the rotten Scotch Fir bark and decomposed dust, which is plentiful at Mellerstane. A six-inch flower pot was now half filled with broken crocks and a layer of common moss (*Hypnum purum*) spread over these, to ensure perfect drainage. The decomposed bark and dust, being well incorporated with the moss, were added till the pot was nearly full, when the rooted plants of *Linnæa* and *Goodyera* were inserted; and more moss added, till the pot was filled tight, rather overfilled than otherwise; similar to the plan on which tropical Orchids are cultivated as far as the planting is concerned. Placed in a cold frame, with a northern exposure, and sprinkled with water regularly, both plants grow to perfection. On the rock-garden, a similar plan of procedure, may be successfully adopted. There must be no stagnation of water near the plants, otherwise the moss decays, becomes sour, and poisons them. Perfect drainage can alone effect this; and as I have heard Orchid-growers state, that their plants grew best when the Sphagnum in which they were planted was also in a growing condition—a similar state of matters should be aimed at with the plants mentioned in this notice.

Notes on Birds in 1878-9. By T. H. GIBB, Alnwick.

POLISH SWAN (*Cygnus immutabilis*).—In the last week of December, 1878, a very fine specimen of this rare British bird was shot at Alnmouth. Its capture was recorded in the *Newcastle Daily Journal*, but by some mistake it was described as a Hooper (*Cygnus ferus*). Subsequently, however, it was sent to me for preservation, and I had the pleasure of identifying it with the *Cygnus immutabilis* of Yarrell. From enquiries which I made, I ascertained that the bird was one of a pack of eight Swans seen off Hauxley, and was wounded by some fisherman; and that it subsequently found its way to the river Aln, to fall to the guns of two Alnmouth sportsmen; so that in all probability, arguing from the hypothesis that “birds of a feather flock together,” the eight birds seen off Hauxley were all Polish Swans. In the Polish Swan, when adult, as exemplified in the bird recently shot, the nail, lateral margins, nostrils, and base of the upper mandible of the bill and lore are black, the remaining parts reddish orange. The elongated opening of the nostrils does not reach the black colour of the base of the upper mandible, as is the case in the Mute Swan, another member of the genus *Cygnus*, but is surrounded by the orange colour. It has also a small tubercle at the base of the upper mandible of the bill, not unlike that possessed by the Mute Swan, but in comparison with which this is very small, and might be denominated rudimentary. The legs, toes, and interdigital membranes, unlike all of the other British Swans, are a pale slate grey. The windpipe is not convoluted, but simply descends between the branches of the forked bone, and forming a circle, passes to the bone of divarication, and thence by the bronchial tubes to the lungs. The Polish Swan is said to be a native of the high northern regions, and the Baltic, and occasionally visits our island. The Cygnets, or immature birds, are also stated to be white in plumage, and never change, and hence the name adopted by Yarrell (*Cygnus immutabilis*). Continental naturalists, says Newman, in a foot note to Montagu’s description of the Polish Swan in his “Dictionary of British Birds,” have not adopted it as distinct from the Mute Swan; but Morris thinks, and we imagine with every show of reason “that the fact of the young having been procured in different

instances in the white plumage is sufficient, in connection with other peculiarities mentioned by Yarrell, to constitute it a distinct bird." I may add, that the bird captured at Alnmouth is pure white. Referring to Hancock's "Birds of Northumberland and Durham," he says, "The Polish Swan is mentioned as having occurred at Hartlepool, on the authority of a Mr J. H. Gurney, jun., in Starling's 'Handbook of British Birds,'" p. 154. I am informed, however, by Mr Gurney himself, that the authority of this notice rests only on a newspaper paragraph. I therefore do not venture to include it in this catalogue;" so that so far as the two northern counties of England are concerned, the Polish Swan is indeed a *rara avis*, and this is, so far as I know, the first time its capture has been recorded in those districts.

BEWICK'S SWAN (*Cygnus Bewickii*).—Two more Swans have been shot near Warkworth, one of which was sent to me, and this I found to be an adult specimen of *Cygnus Bewickii*. What the second was I cannot determine, not having seen it; but from the description of those who have, I have no doubt it was another specimen. I have also heard of four specimens having been shot by the Holy Island fishermen at that favourite rendezvous and feeding ground for all sorts of wild fowl, Fenham Slakes. The severity of the weather, and its long continuance, doubtless have had much to do with the appearance on our sea-board of so many birds belonging to more northern regions.

EFFECTS OF THE WINTER.—We have noted that the severe winter has played sad havoc in the ranks of our feathered friends—the greatest sufferers having been the Redwing, Fieldfare, and the Song-thrush; but it has also reached birds of a hardier nature, such as the Blackbird, Starling, the Finches, Wood-pigeon, and even the Rook, whose hardihood and aptitude to adapt itself to circumstances is proverbial. During the storm we observed that the Rook preyed on birds weakened by its severity, and many a hapless Thrush, in its last stage of exhaustion, was given the *coup de grace* by the sable marauder, and devoured.

Alnwick was visited by hosts of Chaffinches, Hedge-sparrows, and Tits, which daily were seen picking up whatever edible substances they could find in front of our shops, and in our narrowest lanes. A Thrush regularly visited a certain yard, surrounded on

all sides by the gables of three storied dwellings, in the very centre of the town, and the query as to how it found out the crumbs that were placed on a window-sill for a solitary Robin—a constant visitor—is difficult to explain.

Game-birds, except those that had food placed for their sustenance, suffered severely. Partridges left to shift for themselves were reduced to skin and bone. A Blackcock was found frozen to death on a hedge (where a hawk or two yet remained) many miles seaward of the heather hills and alder glens associated with its economy.

The FALCONIDÆ, on the contrary, fared well in the hard times, exemplifying in a marked degree the truth of the old adage that “its an ill wind that blows no one good;” the frost and cold having weakened their prey beyond their power of escape. Gamekeepers speak of a sad destruction amongst hares and rabbits—the first-named having especially suffered—their pined carcasses having been found in the snow in great numbers.

The LITTLE AUK (*Alca Alle*) has again been very numerous, and individuals have been found in the most unlikely places. I had the remains of one sent me by Mr Huggup of Shielddyke, which his shepherd had found on a moor many miles from the German Ocean; whilst others have been found in equally unlikely places.

GREBES have been more than usually numerous—particularly in the waters contiguous to Holy Island. The merry little DAB-CHICK (*Colymbus minor*) I have often observed in the river Aln, sporting in the water in its usual quaint style. I have also had sent to me the SCLAVONIC GREBE (*C. cornutus*), and its rarer congener, the RED-NECKED GREBE (*C. rubricollis*), which were shot near Boulmer. The fine orange yellow with which the base of the mandibles of the last named bird is adorned was vividly bright.

During the last week in January, and up to the close time for shooting, large numbers of BRENT GEESE (*Anas Bernicla*) were procured all along our coast; indeed these birds have not been so numerous for many years. It was rather curious to observe that, whilst Mallard, Wigeon, and other congenerous species migrated from Fenham to the South, at the depth of the storm, the Brents seemed quite content with their quarters, and never left them.

EIDER DUCKS (*A. mollissima*) are now gathering in to the "Rigs," a favourite resort of theirs, near to Holy Island, where they annually collect, preparatory to pairing off and dispersing to the adjacent Farnes and Headlands, to breed. A light cream-coloured specimen built its nest on Ross Links last season, but it is feared it was destroyed before it had completed the incubation of its eggs, and it has not since that time been seen.

SNIFE (*Scolopax Gallinago*).—The severe winter compelled these birds, in large numbers, to leave the frozen rills and bogs of the West, and migrate to the more open water courses of the East, and such was the extent of their exodus thither that they were frequently flushed from the ground in flocks. Mr Chas. Purvis, of Alnwick, computed a flock which he sprung from the moats which surround the ruins of Dunstanborough Castle, to have been composed of at least fifty individuals. Many very large and dark varieties have been captured. I have one in my possession now which is little inferior in size to the Solitary Snipe (*S. major*), and is also so like it in colour that it might easily be mistaken for that bird.

GREEN SHANK (*Totanus glottis*).—One of these birds was seen by Mr Chas. Purvis, near Boulmer.

GREEN SANDPIPER (*Tringa Ochropus*).—Three of these birds made their appearance on the river Aln, in the summer, and remained with us till late in the autumn.

PHEASANT (*Phasianus Colchicus*).—A female cream-coloured variety of this bird was shot in White House Wood, and is now in the possession of Earl Percy.

Alnwick, February 18, 1879.

List of the Justices in the Commission of Peace of the Shire of Berwick, 30th May, 1732. Communicated by the Rev. ROBERT PAUL, Coldstream.

[THIS list was found among family papers, and is in the handwriting of my great-great-great-grand father, Charles Erskine, afterwards Lord Justice Clerk Tinwald, and then Solicitor General for Scotland. He was much in the confidence of successive Secretaries of State. The list is printed exactly as it is in the original. It is titled on the outside—"List of the Justices in the Commission of Peace for the Shyre of Berwick."]

Charles, Duke of Queensberry.
 John, Duke of Argyle and Green-
 wick.
 James, Duke of Montrose
 John, Duke of Roxburgh.
 Archibald, Duke of Douglas.
 John, Marquis of Tweeddale.
 John, Earl of Sutherland.—Dead.
 Alexander, Earl of Marchmount.
 John, Earl of Stair.
 Archibald, Earl of Isla.
 Thomas, Earl of Haddington.—Dead.
 Charles, Earl of Lauderdale.
 Charles, Lord Binning.—Dead.
 Hugh, Lord Polwarth.
 The Justices of the Court of Justici-
 ary for the time being.
 The President and Remanent Lords
 of Session in Scotland for the time
 being.
 The Chief Baron and Barons of Ex-
 chequer in Scotland for the time
 being.
 Duncan Forbes, Esqr., his Majesty's
 Advocate Generall.
 Charles Erskine, Esqr., his Majesty's
 Solr.
 Alexr. Home Campbell, Esqr.
 Sir John Sinclair of Lonformacus.
 Sir Willm. Purves de le ilk.
 Sir John Steuart of Allanbank.
 Sir Robert Saintclair of Stevenstoun.
 Sir James Hall of Dunglass.
 Sir James Dalrymple of Hailes.
 Sir Alexr. Cockburn of Langton.—
 Dead.
 Sir Alexr. Don of Newtown.
 Sir Robert Dalrymple of Castletown.
 — Dead.
 George Baillie of Jervieswood.—
 Dead.
 William Hall, of Whytehall.
 John Carre of Cavers.—Dead.
 Archibald Cockburn of Langton.—
 Dead.
 James Hume of Eccles.— Dead.
 David Home of Wedderburn.
 Thomas Haliburton of Newmains.

Joseph Douglas of Edrington.
 John Home of Ninewells.
 Robert Johnston of Hiltoun.
 John Edgar of Wedderlie. — Sold his
 Estate and Removed from the
 Shire.
 John Swinton of that ilk.
 Robert Pringle of Laughtown.
 George Hepburn of Smeatoun.
 George Home of Cairns.
 Charles Binning of Pilmuir.
 Walter Kerr of Littleden. — Dead.
 Alexander Hay of Drumellzier.
 Walter Home of Bassinden. — Dead.
 John Dickson of Antonshill.—Dead.
 George Home of Kello. —Sold off.
 Alexander Home of Linthill.—Dead.
 Andrew Kerr of Moriston.— Dead
 Lieu. - Coll. Chas. Cockburn of Caldra.
 — Dead.
 Alexr. Hay of Thornydyke.
 Hugh Dalrymple of Whitsomhill.
 George Buchan of Cumlege.
 Thomas Fordyce of Aytoun.
 William Hay of Idington.
 John Scot of Ancrum, Yor.— Not in
 Shire.
 Mr George Carre, Advocate.
 Mr Henry Home, Advocate.
 John Hog of Ladykirk, Esqr.—Sold
 out of the Shire.
 The Chief Magistrates of Each Burgh
 within the Shire, Innkeepers ex-
 cepted.
May be added..
 William, Earl of Home.
 Robert, Lord Blantyre.
 Sir Alexr. Cockburne of Langton.
 Sir John Home of Renton.
 Sir John Home of Manderston.
 Sir John Baird of Newbyth.
 Sir Alexr. Brown of Bassindean.
 John Renton of Lamberton, Elder.
 John Renton of Lamerton, Younger.
 John Stewart, Younger, of Allan-
 bank.
 James Kerr of Morieston.
 Thomas Hay of Mordington.

David Brymer of Edrom.
 John Lumsden of Blawnairn.
 Wm. Home of Bastlerig.
 John Erskine of Sheffield.
 Mr James Winram of Oxenden.
 Henry Trotter of Mortonhall.

Matthew Bell of Mersington.
 John Hay of Lawfield.
 Walter Scot of Harden.
 Mr Ninian Home of Billie.
 Alexr. Home of Jordanfield.
 William Craw of Netherbyres.

Seal of the Priory of Coldstream. By the Rev. ROBERT PAUL, Coldstream.

THIS seal is in the possession of William Martine, Esq., M.D., Haddington, who shewed it to me a year or two ago, and furnished me with the following particulars regarding it. Made of lead, it appears as if it had been reduced in size, by having the rim or edge cut off. On this rim, there was probably the inscription, "SIGILL SCE MARIE DE CALDESTREM,"—which appears on several impressions of the Coldstream Seal attached to old charters in the possession of the Dean and Chapter of Durham Cathedral. After the dissolution of the Priory, it may have been used as his own private seal by some person, who cut off the original legend to render it serviceable for his purpose. It was found by Dr Martine in 1848, in an old basket among family papers, in a room of an old unoccupied house in Haddington, which has been in the possession of his family since 1743. His great-great-grandfather married, in or about 1686, a person of the name of Anna Carson, who is believed to have come from Berwickshire, and it is not improbable that it belonged to her. This inference is a fair one, also from the fact that she possessed another article of some value, now owned by Dr Martine,—a very beautiful silver crucifix, with the initials "A. C." on a small plate attached to it. I can find no trace of the name Carson, however, in the parish of Coldstream, or neighbourhood, or in any old documents connected with it. So far as I am aware this is the only *matrix* of the Coldstream Priory Seal that is extant. There is an engraving of the seal in "*Laing's Scottish Seals*" (Supplement, Plate xv., Fig. 5), but it appears to have been copied from a somewhat worn impression (probably one of those at Durham, referred to above), and this has led Laing to describe as a "crescent," what is evidently the curled up tail of a scorpion. Laing's impression differs from this seal in having the fish turned to the *left*, and in having only *three* instead of *five* star-fishes, or estoiles, in the field.

*On some of the more Remarkable Trees at Marchmont,
Berwickshire.* By Mr PETER LONEY.

MARCHMONT HOUSE, Dunse, lies in lat. $55^{\circ} 43' 30''$, long $2^{\circ} 25' 20''$, at an elevation of 500 feet, and distant from the sea 20 miles.

Measurements of a few of the Spanish Chestnuts growing on a sloping bank facing S.E., the soil being a strong red clay very tenacious of moisture, and the subsoil a hard blue, marly clay, through which water cannot percolate, may, notwithstanding these apparent drawbacks, be interesting to lovers of Arboriculture :—

CHESTNUTS.

No.	Circumference @ 1 foot; at 5 feet above ground.	TRUNK.		TOTAL.	
		Height.		Height.	
No. 1.	19ft. 6in. 16ft. 6in. „	10ft.		66ft.	
„ 2.	16ft. 8in. 14ft. „	12 „		70 „	
„ 3.	15ft. 8in. 13ft. 8in. „	24 „		70 „	
„ 4.	21ft. 15ft. „	31 „		70 „	
„ 5.	16ft. 10in. 13ft. „	42 „		75 „	
„ 6.	18ft. 3in. 14ft. 6in. „	32 „		102 „	

There are about 26 trees in this group. A few years ago one of their companions was blown over, and as carefully as I could I counted the annular rings, making out the number to be about 220.

There are several fine specimens of the Silver Fir here, which also seems to thrive well; dimensions of one of them, and two Beeches, I annex :—

Silver Fir, cir. @ 1 foot 18 feet @ 5ft = 13 feet.—Bole 62, height 104 ft.

1 Beech, cir. @ 1 foot 16ft. 8in. @ 5ft. = 11ft. 9in. Bole 31, height 98 ft.

1 „ „ @ 1 „ 15ft. 10in. @ 5ft. = 11 feet.—Bole 20, height 100 ft.

A Larch of peculiar growth is worth notice. From the ground it leans over at an angle say of 60° . There are no branches on the under side of the trunk, only from the sides and upper part, indicating that it may have been a cutting, and grown in a pot for some years during its youth. This theory gains some credibility from the fact that there is a considerable twist on the bole and bark, such as often happens to hard-wooded plants addicted to have what is commonly called tap-roots, when they are confined too long in pots. There are, at Marchmont, several fine specimens of the Common Yew, of considerable size, and evidently of greater age than any of those I have referred to.

Occurrence of White's Thrush (*Turdus varius*, *Pallas*—*T. Whitei*, *Eyton*), *in Berwickshire*. By ANDREW BROTHERSTON.

DURING the last week of December, 1878, a specimen of this very rare and beautiful Thrush was shot by Mr Forbes Burn, at Hardacres, Berwickshire. Not being aware of its rarity, unfortunately only a portion of the bird was saved—the head and wings, unskinned, with part of the skin of the breast and back—and forwarded to me on the 22nd of January following, to preserve as an ornament for a lady's hat. I immediately took the necessary steps to try and secure what was left of it for the ornithological collection of the Tweedside Physical and Antiquarian Society, which were successful, the owner very promptly and kindly presenting it to that Society. The relative lengths of the primaries may be interesting, as they differ from Yarrell's measurements of the original British specimen, which was shot by Lord Malmesbury in Hampshire, January 24th, 1828, and named after White of Selborne by Mr Eyton, who was not aware that it had been previously named *T. varius*, and described by Pallas as an inhabitant of Siberia. Length of wing from carpal joint, 6½in ; first feather very short, 1¼in. ; the second feather in the right wing is ½in. (probably not being full grown) ; and in the left about ¾in. shorter than the fourth. (The second and fourth in Lord Malmesbury's specimen were equal.) The third is the longest in the wing, being about ¾in. longer than the fourth. Length of bill from gape, one inch four lines. The marking on the head is also different. Yarrell says, "The feathers on the upper part of the head and neck, yellow-brown, tipped with black." In this specimen these feathers are black (becoming lighter on the basal half as they go backwards), with a yellow-brown spot about one-sixteenth of an inch from the tip. In other respects, so far as can be seen, it agrees with his description.

I believe another bird of the same kind was seen on January 19th, by Mr A. Steel. It was feeding on a bare sandy spot, under some large willow trees at the south end of Kelso Bridge. He had an excellent view of it before it took flight ; and after seeing the remains of the Hardacres specimen, he is convinced that it belongs to the same species. Both birds were solitary.

Mr Burn told me that the one he shot, resembled a Hawk when on the wing ; and that some small birds which were feeding on the ground, took flight on its approach.

In Yarrell's lifetime there appears to have been great confusion between the true *T. varius* and other allied species, viz. :—*T. Horsfieldi* (*T. varius*, Horsfield) a native of Java ; *T. dauma*, an Indian Thrush, and *T. lunulatus* from Australia ; examples of one or other of these birds, frequently personating the true *T. varius* in collections.

I am much indebted to Professor Newton, who has seen and examined this specimen, for a large amount of interesting information concerning these Thrushes. He writes, "at least nine examples of this bird have been before now killed in Britain. They are :—

1. Christchurch, Hants, 24th January, 1828.
2. Bandon, Cork, December, 1842.
3. Welford, Warwickshire, 26th January, 1859.
4. Ballymahon, Longford, 1867.
5. Hestercombe, Somerset, January, 1870.
6. Langsford, Somerset, 6th January, 1871.
7. Hickling, Norfolk, 10th October, 1871.
8. Castle Eden, Durham, 31st January, 1872.
9. Probus, Cornwall, early in January, 1874."

After mentioning the example said to have been killed in the New Forest (the Australian bird, *T. lunulatus*) and another example recorded as having been killed near Huddersfield, which, he thinks, also wants confirmation, he says, "I have heard also of three others having been seen—one in Kent, one in Yorkshire, and one in Durham."

"On comparison with a specimen that has been long mounted, the fresh beauty of the colours in yours is very decidedly marked, yet I fear nothing can be done to preserve its tints, and that when as many years have elapsed their richness will have disappeared. I have wholly failed to find any indication that would enable me to determine the sex or age of your bird. There is no question about its being the true *T. varius* of Pallas, though the tail is wanting—an unfortunate thing, as therein lies one of the most curious characters of this species—one that is possessed so far as I know, by only one other species of Thrush (*T. Horsfieldi*)—the presence of fourteen instead of twelve rectrices."

“The real White’s Thrush, *T. varius* Pallas, was first described as an inhabitant of Siberia, to which country, and to the N.E. of Asia (*i. e.*, China and Japan) it is now known to be a regular summer visitant. Owing to causes that I cannot attempt to explain, a small number of examples seem yearly to migrate *westward* in autumn, and to come into Europe, where they occur as stragglers; but the majority, no doubt, retire more or less due southward, for they have been obtained in winter in the Philippine Islands and such like places.”

Zoological Notes. By ANDREW BROTHERSTON, Kelso.

WOLF FISH (*Annarrhichas lupus*), LINN.—On May 10th, 1877, I received an example of this ferocious and repulsive looking fish, which had been captured near Berwick. The stomach contained a large quantity of the remains of various crustaceans and molluscs, which appear to be its chief feeding. The powerful jaws, armed with their large canine looking front teeth, and the strong, rounded, bony, tubercular ones situated on the vomer and palate, are admirably adapted for crushing the animals they feed upon. Notwithstanding its unprepossessing appearance, the flesh is excellent eating, as is generally the case with those fish that feed on crustaceans.

NIGHT JAR (*Caprimulgus Europæus*), LINN.—This bird is increasing in this district. Most of those that are sent to me are young birds shot in the autumn. An adult male was shot on Roxburgh Moor, on the 31st of May, 1877, and another old bird was killed at Sunlaws, May 28, 1878. These two were from the same neighbourhood—within two miles—where, I believe, they will breed. It is very probable that they nest also about Stichill, as I have had several young birds from there. I had one from Liddesdale, August 23rd, 1878, where, I believe, they occur in considerable numbers.

TURTLE DOVE (*Turtur auritus*), GRAY.—An adult female was shot at Caldronbrae, near Stichill, on the 25th June, 1877; another, a young bird, was shot at Cornhill, in the middle of September.

TUFTED DUCK (*Fuligula cristata* LEACH), NESTING AT YETHOLM LOCH.—At p. 180 of this volume, I mentioned that it was probable that a pair of Tufted Ducks had nested at Yetholm Loch, in 1876. I am now certain that three—perhaps four—pairs remained and bred there in 1877. On the 26th of May there were eight pairs on the Loch. I was not there again until July 4th, when I saw four old birds—all males. Wishing to be certain if they were breeding, I applied to Mr Oliver, of Lochside, for the use of his boat, which he kindly granted, and in company with Mr J. Clark approached as near as possible to the most likely nesting place, which is at the S.W. end of the Loch. We found it impracticable to examine it thoroughly, as there is a large space that cannot be reached either by land or water. The Loch is slowly but surely filling up from this end, the plants gradually advancing and encroaching on its bounds. On approaching it by water, we came first to a large bed—varying from ten to thirty yards or more in breadth—of *Equisetum limosum* (L.) with its variety (or rather state) *E. fluviatile* (L.) intermixed. After forcing the boat through these tall Horsetails, there is a narrow strip of open water, extending almost the whole width of the Loch, beyond which is a large extent of impassable swamp, mainly composed of *Ranunculus Lingua*, huge plants of *Cicuta virosa*, with abundance of *Typha latifolia*, *Carex paludosa*, and *ampullacea*, *Scirpus lacustris*, &c., most of which are growing in a semi-floating state amongst mud and water, which becomes gradually firmer as it recedes from the Loch. It is amongst these plants that the Tufted Ducks have chosen their nesting places. When moving the boat slowly round the margin, a female rose within twenty yards of us, and the cry of young was frequently heard, different from the sounds made by young Coots, Waterhens, or Wild Ducks. On the following Saturday, Mr Clark saw, on the open water, near this place, four old Tufted Ducks, accompanied by between twenty and thirty young ones. I had not another opportunity of seeing them until after the fresh arrivals from the north had come. So far as I can learn none of them nested there in 1878. I have seen notices of two nests having been found in Perthshire, in 1878—one of them is recorded in "Land and Water," vol. xxv., p. 516, and the other in the "Zoologist," 3rd series, vol. iii., p. 180. Although the exact locality is not given in either case, they appear, from the

description of the nesting places, to have been two different nests. The first was on an islet in a fresh water loch, "at the end of a slanting under-ground hole, about two feet in length." The second "had been found on a small island under a Swan's nest."

LESSER TERN (*Sterna minuta*), LINN.—An immature male example of this beautiful little bird was obtained near Ancroft, in the beginning of August, 1877.*

ROSE-COLOURED PASTOR (*Pastor roseus*) LINN.—Sometime during the month of August, 1877, one of these rare birds, apparently a young male, was said to have been caught in a garden near Ancroft. When it was sent to me sometime afterwards to re-stuff, it had rather a suspicious look of having been a "skin"—more especially as an attempt was made to pass off another undoubted foreign skin said to have been shot in the same neighbourhood.†

EARED GREBE (*Podiceps auritus*), LINN.—On August 13th, 1877, a female of this species was shot on the pond at Kerchesters, near Kelso. Besides the remains of insects, the stomach contained a quantity of feathers.

LITTLE GULL (*Chroicocephalus minutus*), PALLAS.—I saw an immature specimen of this beautiful little Gull on the 16th of August, 1877, at Coldingham Loch. All the time I was at the Loch—about an hour—it was flying gracefully about, busy catching insects, frequently lifting them from the surface of the water, and only occasionally alighting for a few seconds. In its manner of flight it resembled the Sea Swallow, especially at a distance, indeed the first sight I got of it I thought it was one of those birds. But on a nearer approach—and it came very near, not in the least shy or afraid—the square tail showed the difference at once. The Little Gull in the collection of the late Mr Wilson of Coldingham, and which was in similar plumage, was obtained at the same place.

WHITE-FRONTED GOOSE (*Anser albifrons*), GMELIN.—Another example (see page 183 of this vol.), an adult female was shot near Goswick, by Mr Johnston of Scremerston, about the middle of October, 1877. It is an excellent specimen in fine plumage.

COOK WRASSE (*Labrus mixtus mas*), FRIES and EKS.—A full grown example of this exceedingly beautiful Wrasse was caught

* See a previous notice.—ED.

† Also previously noticed.—ED.

at Dunbar, November 26, 1877. It was $14\frac{1}{2}$ inches in length—12 inches being the usual size. The male and female differ so much in colour, that they were considered to be different species until it was ascertained by Fries that they were the same. The number of fin-rays in this specimen differ from those given by both Couch and Yarrell :—

COUCH—D. 18 + 13; P. 15; V. 1 + 5; A. 3 + 10; C. 14.

YARRELL—D. 17 + 13; P. 15; V. 1 + 5; A. 3 + 10; C. 11, with 6 graduated incumbent ones above and below.

Dunbar specimen—D. 18 + 13; P. 16; V. 1 + 5; A. 3 + 11; C. 11, with 4 graduated ones above and 2 below,

Yarrell's figure of this fish is misleading. The posterior part of the dorsal and anal fins, instead of being pointed should have been rounded.

PECULIAR HABIT OF BADGER.—A full grown female Badger was brought alive to me in the end of November, 1877. Wishing to get a good view of her, she was taken out of the box, and set at large in a room, when she at once tried to hide. Taking another Badger—a stuffed specimen—and pushing it against the living one, she snapped several times at it, but after finding that it had no effect, she placed her head between the fore legs, when she had somewhat the appearance of a large Hedgehog. This was repeated several times with always the same result. It struck me at the time, that the position was instinctively taken for the protection of the most vulnerable part—the breast—but after dissection I discovered that one of the jaws was fractured, so it is possible that it was to save that part. I have not seen any notice taken of this peculiarity by authors, but those who have kept them will know if the first opinion is correct, as I am inclined to think that it is.

DIFFERENCE IN THE SIZES OF BIRDS OF THE SAME SPECIES.—Many species vary a good deal in size according to age and sex. I was much struck with the great difference between two Water Rails, received on the same day (February 9th, 1878) from Mr Cowe. The following are the measurements :—

Length from bill to toes	-	-	Male—16 inches; Female, 13 inches.
Do. tail	-	do. — $12\frac{1}{2}$ „	do. 10 „
Length of wing from carpal joint—	do. —	$7\frac{5}{8}$ „	do. $6\frac{1}{2}$ „
„ bill to gape	-	do. — $1\frac{7}{8}$ „	do. $1\frac{3}{8}$ „

The Water Rail is not uncommon in this district, but owing to their shy and retiring habits, they are seldom seen, especially

during the summer, when they have plenty of "cover." On March 18th I got one which had been killed by flying against a wire fence at Floors.

PARASITIC WORMS.—At p. 288, vol. vii. of "Proceedings," I noticed the occurrence of a cluster of nematoid Worms, in both legs of a Little Grebe. On Feb. 27, 1878, I had a similar case, but in a different species of bird—an immature female Waterhen. When skinning the legs near where the muscles end and the tendons begin, there was a quantity of gelatinous matter, which, as the bird was in good condition—not like the Grebe in that respect—induced me to examine it carefully, when I found in both legs a number of the same Worms, or a nearly allied species, to those found in the Grebe. The chief differences were in their not being so regularly spiral; various sizes being intermixed; and in not occurring in such compact clusters. Some of them were entwined and interlaced together; others, when the lower part of the tibia was pressed from below upwards, came out singly from amongst the tendons with a spiral motion like that of a corkscrew. The Nightjar shot at Sunlaws (see p. 520 of present paper) was also infested by similar parasites—inside the chin, and at the bottom of the socket behind the eye. Some of those from the eye were fully three-quarters of an inch in length.

WHITE WOOD-PIGEON.—There was one nearly all white, shot at Haddon, in the beginning of April, 1878.

GREAT GRAY SHRIKE (*Lanius excubitor*), LINN.—A male was shot near Swinton, April 5th, 1878.

CYCLOPIA IN LAMBS.—Mr Murray, Kersknowe, sent for preservation (April 10th, 1878), a Lamb's head—a regular cyclops, having only one eye in the centre of the forehead. It was only one of about thirty similarly deformed, the whole of them being the offspring of *one* ram. The eye was as is usual in most cases of the kind, a coalescence of two eyes. All died shortly after birth.

COMMON SNIPE (*Gallinago gallinaria*), MULL.—I saw a nest, with four eggs, of this species on May 1st, 1878, at Lurgie Loch. The nest was placed on a large tuft of *Mnium subglobosum* in fine fruit. From the number of old birds seen, several pairs will breed there annually. It has been thought by some that the Jack Snipe breeds in the district, but, so far as I am aware, there is no

authenticated instance of such being the case anywhere in Great Britain.

GARFISH (*Belone vulgaris*), CUV.—A fine specimen, $28\frac{1}{2}$ inches in length (24in., according to Yarrell, is the usual length) was caught in the Tweed, at Berwick, May 8th, 1878, where it appears to be not uncommon about that time of the year.

DEFORMED GRAYLING (*Thymallus vulgaris*), CUV.—A peculiarly curved specimen was got in the Tweed, near Milne Graden, May 15th, 1878. The backbone approached the form of Hogarth's "line of beauty." From the Teviot this fish has spread and increased rapidly during the last few years.

EARLY APPEARANCE OF THE DEATH'S HEAD MOTH (*Acherontia Atropos*).—On the 21st of May, 1878, a fine specimen was picked up alive, on the footpath between Heiton and Kelso, and another was caught at Lempitlaw on the 3rd of June. Both were over five inches across the expanded wings—the largest measuring $5\frac{1}{4}$ inches. From their fresh appearance, they did not appear to have been long out of the pupa state.

SLATE-COLOURED MOLES.—I preserved two specimens of a light slate colour in 1878. Moles of this colour appear to be much rarer than the so-called White Mole, which is not uncommon in some parts of the Borders.

HYBRID DUCK (?)—This bird was shot September 25th, 1878, by Mr A. Robertson, on Hoselaw Loch. Mr J. Harvie Brown, who saw it shortly after it was set up, was inclined to think that it was a hybrid, between the Wild Duck and the Shoveller (Mr Robertson informs me that the Shoveller has bred at the Loch), but it appeared to me to be too large for that cross—being larger than a Mallard, but much lighter in colour. Possibly it was between the Wild and Tame Duck.

MERLIN (*Falco Esalon*), TUNST.—A few of these beautiful little falcons still occasionally visit us in the autumn and winter. I had two, both males, in September, 1878. In one of them the tail was as regularly graduated as that of a Magpie. When moulting, the tail and wing feathers are shed in pairs, on opposite sides at the same time, always keeping them balanced. In this district *very few* female Merlins, in proportion to males, occur. Is it the same in other parts of the country? If so, what is the reason?

BERNICLE GOOSE (*Bernicla leucopsis*), BECHST.—A male was

shot at Yetholm Loch, October 7th, 1878. This is a rare Goose in this neighbourhood. There is one in Kelso Museum (to which institution this one has been presented) which was shot at Cavers, over 60 years ago.

FOOD OF THE HOODED CROW (*Corvus cornix*), LINN.—In the "Proc." 1876, p. 182, I mentioned one that was shot near Yetholm, Oct. 20, 1876, the stomach of which was full of Beetles and barley. I dissected another, shot at Blacklaw, Nov. 5th, 1878, whose stomach contained nothing except sea-shells and barley intermixed. The shells appeared to have been in the stomach for some time, while the barley seemed to be but recently swallowed. As the "crow flies," Blacklaw is 20 miles from the sea.

CREAM-COLOURED HEDGE-SPARROW (*Accentor modularis*), LINN.—A beautiful specimen was obtained at Smailholm, November 18, 1878.

CRESTED GREBE (*Podiceps cristatus*), LINN.—A fine male of this species was shot on the Bowmont, near Paston, November 18th, 1878, but was nearly lost, the river being in high flood at the time. I have heard that, about the same time, a female was obtained a short distance farther down. Some of the Grebes have the curious habit of eating their feathers. This specimen had a large quantity in its stomach, with the elytra of a few Beetles intermixed. The feathers, which appeared to be mainly from the breast, were dyed green, as if it had been feeding on some vegetable matter.

GLAUCOUS GULL (*Larus glaucus*), MULL.—On the 19th November, 1878, an adult male, in full winter plumage, was shot at the Magdalene Fields, Berwick, and secured for the Museum of that town, which already possesses a very good series of the Common Gulls of the district.*

* See a previous notice.—Ed.

Miscellanea, Extracts from Correspondence, &c. By
JAMES HARDY.

I. ZOOLOGICAL.

OCCURRENCE OF THE COMMON MARTEN IN BERWICKSHIRE.—In the Statistical Account of the united parishes of Cockburnspath and Oldcambus, p. 299, prepared in December, 1834, the Rev. Andrew Baird reports that the Marten (*Martes Fagorum*) is said, a good number of years ago, to have inhabited the woods near the Pease Bridge. Till lately I had supposed that this hearsay had originated from some traditions of the Wild Cats that once made those woods their rendezvous; but now I think its correctness is undoubted, as Mr. Peter Cowe, of Lochton, has an actual specimen of the Marten to shew, and had heard of another in the very locality that I had questioned. The one preserved in Mr. Cowe's collection, he writes of date 27th March, 1879, "was caught in Dowlaw dean in 1862, in a rabbit-trap. I had it alive for a week, but it would not eat. A short time, say a few weeks, after, another was caught about the Pease Bridge, but was destroyed before I heard of its capture." Mr. Kelly records that a Marten was trapped in 1848, in Lauderdale, by Mr Scott, which was the only example known there for half-a-century. It was stuffed by Walter Simson, Lauder. This furnishes us with four Berwickshire instances of the animal.

WATER-SHREW (*Sorex fodiens*).—Altogether I have not seen over half-a-dozen of this obscure-living animal. In the early part of winter a pair appeared here on the kitchen floor, having probably issued from a drain that carries off the water from the tap that supplies the house. Unfortunately they were killed as mice, before I was aware of their presence. Several of the Common Shrew have been found dead this spring.

SQUIRRELS.—Mr Kelly writes that the first Squirrel known in Lauderdale was shot in 1838 or 1839. No further interference was made with their increase, until about 1849, when they commenced to eat the bark of the fir-trees near the top, and an order was given to diminish their numbers. Subsequently it came to be understood that they were great egg-eaters, and the persecution against them was then renewed with greater vigour.

RAVEN (*Corvus Corax*).—On January 31, 1879, a Raven was seen near Siccar Point, and then flying across the country,

croaking and diving as it went, it formed a very striking object with its broad black wings and stout body, set off against the face of nature wrapped in snow. I see one or two Ravens here occasionally every year.

JAY (*Garrulus glandarius*).—Thomas Elliott writes that his brother, living near Detchant Wood, by Belford, saw, on January 31, 1879, a Jay in the wood; the only one he had ever heard of being seen in that part of the country.

KINGFISHER (*Alcedo Ispida*).—The same party also saw a Kingfisher, at the beginning of the storm in December, in a ditch near Lilburn Tower, Northumberland. On April 21, 1879, I observed a Kingfisher on the Eye Water at Reston. This bird has been seen as far up this stream as Grant's House.

BANDED BLACKBIRD (*Turdus Merula*).—"At the beginning of this storm, a Blackbird was sent me by the Haggerstone gamekeeper, with singular markings. Across the neck, behind the shoulders, back and wings, and lower back above the tail coverts, extend white bands somewhat under an inch in width. Down the breast, but not meeting those on the back, extend similar white bands. It is in the hands of the taxidermist, and can therefore be seen at any time."—DR. COLVILLE BROWN, *Berwick-on-Tweed*, Feb. 1, 1879.

STOCK-DOVE (*Columba Cenas*).—"From the same kind person, and shot on the same estate, I got a fortnight after the previously named bird, a very good specimen of the Stock-Dove. It was found flying, feeding, and roosting with a flock of Wood-Pigeons."—IBID. This bird is becoming a denizen. Of date April 28, 1879, Mr George Bolam apprises me, that on the previous week he came upon the Stock-Dove breeding in the neighbourhood of Paxton, and got two fine eggs from a rabbit-hole on a steep bank near Hutton Bridge.

THE BITTERN (*Ardea stellaris*).—A beautiful Bittern was shot by Mr Arthur B. Collingwood, on the Aller burn, near Lilburn Tower, 10th January, 1879, and has been set up for preservation.

GREEN SANDPIPER (*Totanus ochropus*).—August 22, 1877. After a continuation of wet weather, several temporary pools were formed in the dean at Oldcambus, which were frequented by Wild Ducks; and the restless Redshanks, leaving the sea-side, circled round the margins. To one of the loneliest also, a Green Sandpiper resorted for a few days. It appears to delight in quiet

tarns, and remote water-courses, where it can pick up worms undisturbed. This is the character of the situations in which hitherto I have surprised this chance autumnal visitant.

WATER-RAIL (*Rallus aquaticus*).—Thomas Elliott mentions that on January 31, 1879, his retriever dog brought him a Water-Rail from some marshy ground near the Aller burn at Lilburn Tower; the first he had seen there for many years. Dr. Stuart, of date 6th March, 1879, states that a man called on him on the previous evening, with a fine specimen that he had shot of the Water-Rail at Billie burn, in Chirnside Parish. As regards these birds, Mr J. A. Harvie Brown, of Dunipace House, Larbert, writes of date March 9th, 1879, "Seventeen Water-Rails were shot one day by one gun at Tayside. One Spotted-Crake was seen amongst them. Water-Rails have been unusually abundant here."

WILD SWANS.—Flights of Wild Swans of various species have, this winter, been scattered along the Northumbrian coast, about some of which Mr Gibb has already told his experience. For other particulars I am obliged to Mr George Bolam, but as a minute examination is required for identification, unfortunately the species cannot be precisely determined. By a letter from a correspondent in that vicinity, of date February 3, I learned that a short time previous a Wild Swan had been shot at Weetwood on the Till; but from Mr Bolam's observations, it had rather been fired at, than secured. "On the 8th January last," he writes, "when at Weetwood, I saw a Swan in the Till, either a wild one or a tame one escaped: it seemed to have been wounded about the back, as when flying the tail was held a little to one side, instead of being straight, and it had at first some difficulty in rising. Several times I got quite close to it, and had a good opportunity of examining it. In colour it was grey and white, the grey in some parts being of a sandy shade, and the bill was pale yellow, with about an inch of black at the base and about the same quantity at the tip. There was no *raised lump* on the top of the bill. When rising from the water—I put it up about half-a-dozen times, and each time it flew only a couple of hundred yards or so—it uttered a hoarse croak or quack, though not very loud, and when flying it occasionally whistled. The noise made by its wings was very loud, and quite audible when the bird was flying a hundred yards, or even farther away. On reaching

Berwick that night, I was rather surprised to see a Swan hanging up in one of the game shops, and on examining it, I found that, as near as I could tell, it was exactly the same as the one at Weetwood. This bird was killed near the village of Lowick." Mr Bolam thought that both might be young Hoopers. With regard to the Swans on Fenham Slakes, Mr Bolam procured from the Rev. W. W. F. Keeling, of the vicarage, Holy Island, the information that "Thomas Bowey, over at the Beacons, shot on the slakes a young one, rather small for a Swan [perhaps a Bewick's Swan] colour dark grey. Mr Hardy, on Fenham Flats, shot two larger birds—but of the same colour, I am told, viz., dark grey; older birds." Subsequently, Mr Bolam had a talk with an old shore-shooter, who told him that a "lot" of Swans have been shot on the slakes during the past winter. One man got six, and two other men one each. He had *heard* of several others being shot, but of these eight he was *sure*. Mr J. A. Harvie-Brown kindly informs me that "a flock of 60 Wild Swans wintered in the island of Tyree. In most seasons from five to a dozen winter there." A great many are recorded in the "Field," from different parts of England.

GREBES.—Mr Bolam also notifies that he heard of a Grebe, probably a Red-necked one (*Podiceps rubricollis*), having been taken alive near Boulmer, the measurements of which are from tip to tip of wings, 30 inches; length from tip of bill to tip of tail, 17 inches, or thereabouts; which are nearly the dimensions of that species. It is now preserved and in the possession of Mr Grey, of Longhoughton. We shall probably be able to verify the species. He also saw at Tweedmouth, a Grebe which had been killed in the Berwick dock with a stone, in February. This appeared to be a Slavonic Grebe (*Podiceps cornutus*). In a letter, dated 15th March, Mr Robert Gray remarks that the Crested Grebe (*P. cristatus*) has been the commonest of the Grebes during the present winter on the east coast of Scotland. Mr J. A. Harvie-Brown has proved by dissection that Little Grebes (*P. minor*) feed on minnows.

LITTLE AUK (*Mergulus Alle*).—Four Little Auks or Rotches were found in Berwick and close neighbourhood in January. In the same month, after the subsidence of the storm, a Little Auk was found on the turnpike road near to Detchant farm, Belford. It was unable to fly. About the same period another was found

alive on the road at Littlehoughton, near Bilton, by the Rev. Samuel Bucknell, Howick. Little Auks were caught inland in Fifeshire.

ON THE CHANGE OF COLOUR IN THE FEATHERS OF THE HEAD OF THE BLACK-HEADED GULL (*Larus ridibundus*).—"Berwick-on-Tweed, April 9th, 1879. For the last three years I have closely watched the change of colour in the Black-Headed Gull, and I am now quite convinced this occurs from moulting, and not from the feathers altering in hue. This happens earlier or later, just as the spring is early or late. In 1877, I observed many Gulls with the brown tinge over their heads quite as distinct in the end of January as I did this year at the end of February,—and precisely in the same way does the weather affect their departure from the sea-side to their inland haunts. In warm springs they go away early; in cold, they remain three or four weeks further on with us. Some individuals put on their dark head-dress earlier than others, and these are the first to take their departure. The moult itself begins at the occiput, and spreads over the top and sides of the head; and the slaty black feathers behind the eye are also shed, and replaced by the sooty black feathers common to the whole head. In this way the colour of the head of this beautiful bird assimilates in summer to the dark hues of the arable land; and in winter again resumes the colour more in keeping with the sheen on the river and sea. This year I intend to watch the autumnal change, and shall let you know the result."—COLVILLE BROWN, M.D. On this interesting topic, Mr Brotherston, who suggested the inquiry, has a right to be heard. Of date April 3, 1879, he remarks: "I am, if possible, more convinced than ever that the change in plumage of Gulls, &c., takes place in the manner I mentioned previously. There is an excellent article on the subject in the 'Zoologist' for March, 1879. It is translated by Mr Dresser from the Swedish of W. Meeves, and confirms my opinion in every particular."

GOLDEN EAGLE (*Aquila chrysaetos*).—A young male was shot at Polmood, near Biggar, on the confines of Peeblesshire, in the last week of December, 1878. This bird, which was sent to Mr Hope for preservation, is small in size and nearly black in plumage, and has a very conspicuous white spot on the upper wing coverts, giving the bird the appearance of wearing epaulets. I have never before met with the Golden Eagle in this state of plumage on the mainland of Scotland, although it is well known

in the Western Hebrides by its Gaelic name, *Iolair dhubh*, signifying Black Eagle.—ROBERT GRAY, 13, *Inverleith Row*, *Edinburgh*, 22nd April, 1879.

HEN HARRIER (*Circus cyanens*).—A female of this species was shot at Penicuik, on 28th March, 1879. The bird is now so seldom met with in Midlothian, that its occurrence, at any season, seems worth placing on record.—IBID.

HOOPOE (*Upupa Epops*).—A fine specimen—a male—of this interesting bird was shot near Elie, in Fifeshire, on 8th April, 1879, and sent to Mr Small, taxidermist, Edinburgh, in whose hands I saw it a few days afterwards.—IBID.

RED-THROATED DIVER (*Colymbus septentrionalis*).—A very fine male, in full breeding plumage, was shot at Queensferry, on 31st March, 1879. This bird is very rarely seen in summer dress in any of the Eastern Counties of Scotland. The gular patch is singularly lustrous in this specimen, but I suspect its lustre would have faded as the season advanced.—IBID.

I am informed by Mr Robert Waite, Dunse, that he has stuffed the following local birds since November, 1878; a BUZZARD, shot at Blackburn, in the parish of Cockburnspath; a MERLIN, found on the Knock Hill about four miles from Dunse; three WATER-RAILS:—one from old tile clay pits near Harcarse, another from Billie burn near Chirnside, and the third from Kimmerghame; likewise a GOOSANDER from the Whiteadder near Edington Mill. Mr Waite, in September last, saw a bird in his garden at Maryfield, with a conspicuous ruddy back—a little less than a Blackbird—which he is confident was a RED-BACKED SHRIKE. He had only a momentary glance of it, however, and nobody else seems to have come across it.

MOTELLA TRICIRRATA.—In "Proceedings," vol. vii., p. 470, I recorded *Motella tricirrata*, the Three-bearded Rock-ling, as a Berwickshire fish, which was taken by a boat's crew belonging to Cockburnspath Cove, on the 8th April, 1875, in a crab-creel, off the coast between Siccar Point and Redheugh. Another has been obtained, April 24th, 1879, by the same men, while fishing for crabs, nearly on the ground where the other occurred. It agreed in every respect, even in size, with the previous example. This, which would have been a prize to a local museum, was dispatched to London, where the consignee did not think it worthy of notice.

ACHERONTIA ATROPOS.—A very fine example, recently developed, was received in June, from Innerwick, East Lothian.

II. BOTANICAL.

CHELIDONIUM MAJUS. Roadside near Spittal-on-Rule ; double variety.

VIOLA AMÆNA. On a sandy moor near the mouth of the Tyne at Hedderwick hill, E. L. ; and on the summit of Ruberslaw, Rox.

CERASTIUM ARVENSE. Plentiful on West Barns links, E. L.

VICIA ANGUSTIFOLIA, *Roth.* The true plant was found in July by Dr. Stuart and Capt. Norman, a mile west from Gordon.

ROSA RUBIGINOSA. West Barns links, E. L.

SAXIFRAGA HIRCULUS. "It is a duty I owe to the Club, to inform the members that *Saxifraga Hirculus* is all but extinct at Langtonlees dean, in consequence of a number of sheep drains having been constructed through the place where it used to grow. My second son and Capt. Norman were up at the station last summer, and came back with hardly a vestige of a specimen. It, however, may spring again, but I am not sanguine. At one period it was plentiful."—*Dr. Charles Stuart.*

VIBURNUM OPULUS. In a thicket on the Emerscleugh side of the burn that flows past Thurston Mains, well up the burn, E. L.

CUSCUTA TRIFOLII. On clover in a sandy field near Hedderwick hill, E. L.

VERBENA OFFICINALIS. Tweedside near Norham, mixed with a number of river-side weeds.—*Capt. Norman, R.N.*

MARRUBIUM VULGARE. Innerwick Castle, E. L.

LYSIMACHIA VULGARIS. A large mass on the banks of the Till, near Twizel,—Sept. 17, 1878.—*Capt. Norman.*

BOTRYCHIUM LUNARIA. Plentiful on a sandy portion of moor near Hedderwick hill, E. L.

OPHIOGLOSSUM VULGATUM. In a thicket of *Pteris aquilina*, near the sea-side, behind St. Helen's Church, Oldcambus. A number of specimens grow there, while in the original locality it is most difficult to find.

ENCALYPTA STREPTOCARPA. On conglomerate rocks, in the upper part of Ogle burn, E. L.

HYPNUM POLYGAMUM. In the same locality. In sandy soil.

GYMNOMITRIUM CONCINNATUM. In fissures of the Northern Cairn, &c., Cheviot.

SARCOSYPHUS EHRHARDTI. Bizzle, and in fissures of the Northern Cairn, Cheviot, May, 1867.

SCAPANIA UNDULATA. In rocky streams, and in ditches, Careburn; Cheviot; Oldcambus hill; Skippath dean, E. L. Very bitter tasted.

———— NEMOROSA. On peaty soil in the Bizzle; Fairy Castle dean, above Oldhamstocks.

JUNGERMANNIA OBTUSIFOLIA. On gravelly, peaty soil, above porphyry, on heathy banks near the Care burn, N.

———— CRENULATA. In the upper part of Ogle burn, E. L.

———— WILSONIANA. Damp places on Tweedside, at Rabbit banks, Kelso.—*A. Brotherston*.—In damp hollows over which water trickles, and near waterfalls; sea-banks, near Redheugh and Oldcambus.—*J. H.*

———— BARBATA: Var. SCHREBERI. On a dike by a roadside near Yetholm, May 11, 1878.—*A. Brotherston*.—The common form grows in Oldcambus dean, and on the sea-banks; also on Dowlaw and Penmanshiel moors, and at Black-Craig, Pease dean.—*J. H.*

———— CONNIVENS. Mixed with *Sphagnum* on Penmanshiel moors, but examples from the Bizzle are in large separate pale masses.

SPHAGNACEETIS COMMUNIS. Among *Sphagnum obtusifolium*, on the top of the Bizzle, May, 1867.

MASTIGOBRYUM TRILOBATUM. In the wood between Goldsclough and Dinsdale, Cheviot.

LEPIDOZIA SETACEA. Beneath long heather at the borders of peat-pits in Penmanshiel and Dowlaw mosses; also on Cheviot.

———— REPTANS. Over-running Hypnum, upper part of Cockburnspath Tower dean; a dwarf pretty olive-brown coloured variety in the Bizzle.

PTILIDIUM CILIARE. Bizzle, and the top of Cheviot.—*J. H.*—Drakemire moor, and on trunks of trees, Bunkle wood.—*John Anderson*.

MADOTHECA RIVULARIS. On very dry, but very much shaded, igneous rocks, Newtondon, Berwickshire, March, 1879; also on a tree there. I gathered the same species at Wooden Linn in 1875, but could not find it lately.—*A. Brotherston*.

LEJEUNIA SERPYLLIFOLIA. Moist rocks, Pease Bridge; Rocks below Cockburnspath Tower; Lemanton dean.

PELLIA CALYCINA, *Nees*. Var. FURCIGERA, *Hook*. In dripping places in the Rabbit banks plantation, Kelso.—*A. Brotherston*.—In similar places near the Waterfall on the sea-banks near Redheugh.—*J. H.*

Notes on the Effects of the past Winter. By ANDREW
BROTHERSTON, Kelso.

THE extreme severity and the long duration of the winter of 1878-79 will be long remembered, and notes of its effects in different localities will be interesting. Judging from newspaper and other reports of the number of birds that have died from starvation in various parts of the country, this district, as far as my experience goes, has suffered comparatively little. Although the frost was not so severe, or the snow so deep, as in some localities, still it was very hard, the thermometer, in the vicinity of Kelso, falling on two nights to 3° below zero. The effect on different species and genera of birds has been very different. The great majority of those that I have dissected have been in excellent condition: "pined" birds were the exception; indeed, I have had more very fat birds, with fewer "pined" birds in proportion, during the past winter, than any previous one that I can remember. The fat appears to be a provision of Nature to protect them from the cold.

Fieldfares and Redwings felt it most; they suffered severely in the early part of the storm; but very few of them died while they remained with us, which was not long after the storm commenced. I believe they would either go farther south or take up their quarters on the coast, where there would be something turning up for them after every tide. Some of them had returned on March 10th. Wood-pigeons, for the most part, fared badly; but some were to be had in good condition throughout the whole winter. In the second week of February I saw numerous Cole-Tits (no Blue Tits; most probably they had migrated southwards) flying about and searching for insects or their larvæ on the trees and hedges, in their usual active manner. Chaffinches, Bramblings, Sparrows, Yellow-hammers, and other hard-billed birds, have, to all appearance at present, come through the ordeal with very little loss. About the usual numbers are to be seen in their regular haunts, which, to the farmer and gardener, is rather unfortunate. What with the destruction of birds of prey, protective laws, &c., the great increase in the number of the hard-billed birds in many parts of this district has become a perfect pest. In many gardens about Kelso, where the seed beds of the various *Brassicæ* were not protected in the spring,

the young plants, as soon as they appeared above ground were, as usual, pulled up by these birds, and the seeds eaten. Even onions, leeks, &c., the seeds of which they do not eat—but apparently from the force of habit—are also pulled up and left to die on the surface. Contrary to expectation, the buds of gooseberries and red currants have not suffered so much from their depredations as usual, owing, I think, to the protection afforded to them by the covering of snow by which they were protected.

The following notes are from birds dissected during winter:—Hawks (Sparrow and Kestrel) were very fat; Owls also, especially the Tawny Owl, exceedingly fat. The only substances found in their stomachs were the remains of mice and a few rats—no birds. The Creeper and Skylark were in fair condition in the middle of February. In the beginning of the same month, a pair of Siskins, which had been feeding on the seeds of the alder, were in excellent condition. Rooks generally are in fair condition. Some of them commenced nesting at Ednam, Edenhall (at Edenhall in greatly increased numbers), and other places in this neighbourhood, in the end of February—the usual time—which, if they had been hard up, would not have been the case until later in the season. Kingfishers, of which I had four during the storm, were all fat. They were obtained on the smaller burns and streams that were not frozen over. The cold does not seem to have any bad effect upon them, unless, as sometimes happens, they get frozen to their perch. Grouse—both black and red—in February, though not fat, were in fair condition; one, a grey hen, was obtained in the beginning of the month on Tweedside, a few miles below Kelso—a long way from its natural haunts (the Lammermoors, on the north, or the Cheviots, to the south). It seemed to have eaten any green thing that came in its way. The crop was distended with a large quantity of newly-swallowed leaves and buds, mostly *Geum* with a little grass and a few *Veronica* leaves intermixed. So far as I can learn from shepherds and others, they had seen no dead birds on the moors as yet. But it is probable that some of the weaker birds, as the spring advances, will pine and die. No Lapwings were seen throughout the winter; but some of them are now (March 10th) returned from the sea-coast. Common Snipe and Woodcock, in the end of last and beginning of this year, were

both plentiful and fat—Jack Snipes rare. Dunlins, Ringed Plovers, &c., from the coast, were very fat; and a Curlew, in the end of February, also from the coast, was exceedingly fat, having a thick layer both externally and internally. Several times—about midnight—during March the peculiar call of large numbers of Curlews was heard as they were flying, at a great height over the town (Kelso). Apparently they were making partial migrations between the sea-coast and the Cheviots—leaving the coast when the weather became fresh, again to return when frost and snow set in, from the hills and moors. None of our birds appear to thrive better than the Heron during frost. I had several, both adult and immature; all were fat. Trout and par were their chief feeding; one had, in addition, the remains of a large frog in its stomach; in that of another there was nothing except a number of parasitical nematoid worms, about three inches in length. I suppose it had been shot before getting breakfast. Coots apparently do not fare so well as the Waterhens, some of the latter being very fat. In the early part of February I had two Brent-Geese, both fat; their stomachs were full of grass-wrack (*Zostera marina*, var. *angustifolia*). They had probably been feeding on the “slakes” between Fenham and Holy Island, where this plant occurs in great abundance. I heard that there were so many killed there about that time that they were selling at one shilling each. All the *Anatidæ*, especially the diving sorts—Golden-eye, Tufted Duck, &c.—have had abundance of food—larvæ of aquatic insects and shells, chiefly *Physa fontinalis*; no appearance of fish of any sort. A Mallard from near Gordon had in its stomach, besides the roots and leaves of aquatic plants, and a large number of the shells of *Pisidium pusillum*, a quantity of *Sedum acre*—a plant which I had not before found in any bird. Its fresh green colour would look tempting on the tops of the “dry stane dykes,” and other bare spots, from which the snow had drifted. Owing to the severity of the frost, the lochs and ponds were all frozen over; consequently the Ducks have not been so numerous in this district as usual this winter. Most of them have been obtained on the open parts of the Tweed and its tributaries. Goosanders, on the contrary, have been more numerous (they are common every winter and spring), and excessively fat. A much greater proportion than usual were adult birds. Nearly every one that I have dissected

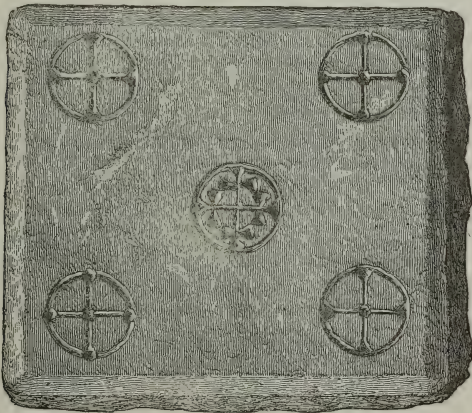
has been gorged with trout and par, in various stages of digestion, and from three or four inches in length up to nine and a half. One of them had been feeding on eels. They must devour large quantities of fish, as the digestive process goes on very rapidly. Often the head of the fish is decomposed, while the tail is quite fresh. They are invariably swallowed head first. The Little Grebes were in good condition; one, in addition to the remains of aquatic insects and their larvæ, had a quantity of salmon-roe in its stomach. The feet of several Grebes and Ducks were frost-bitten, part of the toes and web being lost. One, a Tufted Duck, was found frozen to the ice.

Three Little Auks were captured during the winter; all were very much emaciated, being little more than skin and bone—one of them was found fully fifteen miles from the sea. Another was seen flying down the Tweed near Sprouston. The various species of Gulls were very fat. Several of them, in the very depth of the winter, were fatter than any birds that I had previously seen. Judging from the contents of their stomachs, it is difficult to say what they had been feeding upon—a few small fish; but chiefly, I think, the carcasses of animals and dead fish which have floated down the river. Any Squirrels that I have had were also fat. The Squirrel is supposed by some to lie dormant during frost, but I am convinced that such is not always the case, as I have seen them when it was very hard. The Rabbits, especially in the upland districts, suffered very severely; whilst in some parts, where they had access to the turnips,—which were a splendid crop—they fared better. Much damage has been done by them in young plantations by barking the trees. The Field Vole (*Arvicola agrestis*) has also been very destructive (on one estate, at least, that I have seen); but their work is not so apparent, as their operations were confined to barking the young trees just above the surface, where it is hidden by the withered grass and other herbage.

From the above notes it will be seen that there are many birds which, instead of having been starved with cold and hunger, were the opposite. Their natural instinct came to the aid of those which felt it most, taking them either to the sea-side or to warmer climates, where suitable food and shelter would be more easily obtained. Now that the winter is past, the small birds, instead of being all but annihilated, as many writers prophesied, are still to be seen in about their usual numbers.

On an Altar Stone found at Coldingham, in 1877. By
JAMES HARDY.

MR JAMES WOOD, at the Club's meeting at St. Boswell's, 26th September, 1877, exhibited an Altar Stone, which during the summer he had fortunately rescued from destruction, by securing it when it was turned out from among the soil in Coldingham Churchyard, during the operations preparatory to an interment. It is a smooth quadrate slab, slightly rounded at the corners, of a white fine-grained micaceous sandstone, $9\frac{3}{4}$ by 11 inches in breadth and length, and about $1\frac{1}{2}$ inch in thickness. On it are sculptured five circles, inclosing five crosses, one circle in each angle, and one central; the cross in the centre is terminated by four crosslets. Five dots or stigmata appear to have been intended to be represented at the intersections of the four radii; they are more marked on two circles than the others. Mr Wood presented the slab to the Scottish Societies of Antiquaries, the proper depository for objects that may be classed as national antiquities, and that Society has reckoned it of such interest as to have caused an engraving to be made from it, and has done the Club the favour to allow the first use of the cut to be made for the Proceedings.



According to Walcott (*Sacred Archæology*, p. 15), the *Mensa* (*lapis integer*) or upper stone slab of an altar, "Should be of one

piece, to denote the unity of Christ's person;" this "Mensa, or upper immovable slab of stone of one piece, was laid on a cube of stone-work in the altar" (p. 374). Fosbroke (*Encyclop. of Antiq.* i. p. 94) says that "the authentic mark of an altar-table was its five crosses." These signify the five wounds of our Lord. (*Shipley's Gloss. of Ecclesiastical Terms*, p. 21).

The precise number of altars in the church of the Priory of Coldingham at the Reformation is uncertain. The popular tradition is that five priests preached in it at once, without incommoding each others' hearers; but as preaching was unusual, it must have meant five priests celebrating. We know that the church had two officiating chaplains. The tradition is at least a testimony to the former great extent of the fabric. By an item in the Accounts of the monastery for 1344, we are made aware that there were then three altars. A covering, or some sort of canopy, had then been acquired for the three altars, and this, along with the salary of the carpenter covering them, cost three shillings (*Inventories and Account Rolls of Coldingham*, p. cvii., note). In the Account Rolls we frequently meet with mention of the high altar. It was upon the high altar, that at a very early period, King Edgar placed the symbols of investiture of the whole village of Swinton, which he had bestowed on the Coldingham monks (*Coldingham Charters*, No. iv.) Receipts for the altarage occur now and again. In 1368, three towels are entered for the high altar; but in 1371, 1372, 1373, and 1374, we have three pairs of "towelys" for covering the altars. In 1371, the high altar had a cloth (*pannus*) of "Arasweryk" (tapestry made at Arras, in Flanders); and in 1373, in addition, two white cloths for the same during Lent. Two iron candelabra stood before it. The "paxbred" at that date was of silver. In 1374, the high altar had a "dorsal," or cloth, hanging at the back of the altar. In 1376, a "frounteylle," a pall for hanging in front, was procured for the high altar. In 1446, there were in the church two "twelde" towels, with two "frontels" of silk, with gilt arms on the same, for covering altars; also, two other towels for covering altars, with two frontals for the same. These four frontals appear to indicate four altars at that date. There is a separate entry in 1374 of there being in "the chapel," a gilt cup with two towels, for the altar. In 1446, there were two "super-altaria," "portable altar stones set up into portable altar frames;"

“removeable, precious, and often very costly coverings of marble or metal upon a frame of wood, which were placed on altars for purposes of magnificence and devotion.” These are the principal particulars supplied by the Inventories about the Coldingham altars.

The Priory of Coldingham having been dedicated to the Virgin Mary, we might expect that one of the altars would be set apart to the patroness. Accordingly this was the case. A Retour of April 6, 1620, in favour of Jean Home, wife of Mr Alexander Home, minister of the word of God at Ayton, heiress of her father, Alexander Home, in Coldingham, discloses the particulars of the endowment for sustaining the services at this altar. It consisted of the cultivable lands in Coldingham, underwritten, viz., an acre called Langlands-aiker; three perches commonly called Ladyrig; two portions of the same called Milnesyid; an acre called Fluirdensyde; three perches of land called Steill; an acre of land in Eyemouth named Mylneland; two portions of the same with a dwelling called Ladiehous, and a garden in the town of Coldinghame; another dwelling in that town; all situated in the town, territory, and barony of Coldinghame, the tithes being included; which lands, &c., had once belonged to the Chaplain of the altar of the Blessed Mary, the Virgin; the value on the tax roll being 13 shillings. (Retours, Berwick, No. 118). On February 19, 1624, Alexander Home de Houndwood is retoured heir of Mr (or Revd.) Alexander Home de Houndwood, his father, who was perhaps the same as the minister of Ayton (Ibid, No. 133). The lands of St. Mary, however, are not mentioned, as forming a share of his heritage.—According to Walcott, the altar of St. Mary in a large church was usually in a chapel eastward of the presbytery.

The date of this relic of the old religion cannot be readily ascertained. The design may date from the ninth century. “In the Alte Dom Chapel of the Cloisters, Ratisbon, an altar of the ninth century has crosses within circles” (Walcott’s *Sacred Archaeology*, p. 20). But it may more properly have belonged to a later stage in ecclesiastical history, when emblems assumed an exaggerated importance. In Aske’s Yorkshire rebellion, in 1536, against Henry VIII., entitled the “Pilgrimage of Grace,” the five wounds were represented on the banners, to inflame the zeal of the multitude. “For giving it reputation, certain priests

with crosses led the way, the army following with banners, whereon were painted the crucifix, the five wounds, and the chalice" (Lord Herbert of Cherbury's *Henry VIII.*, apud Kennett, vol. ii., p. 205). The northern rebels against Elizabeth, in 1569, could discover nothing more flagrant as an incentive than the same devices. From Durham, "they proceeded by small journeys, saying mass in all places they came to, and marching in their ranks, with colours flying (some of them bearing the five wounds of Christ, and others the chalice) whilst Richard Norton, a reverend old gentleman, bore a cross with a streamer before them" (Camden's *Elizabeth*, in *ibid.*, p. 422; also *Annales Rer. Ang.*, p. 166, London, 1615). Stowe (*Chron.*, p. 663) confuses the cross and the banners. "To get the more credit among the favorers of the Romish religion, they had a crosse with a banner of the five wounds borne before them by Richard Norton." It is this latter statement that Wordsworth has adopted in the "White Doe of Rylstone."

"For on this banner had her hand
Embroidered, such was the command,
The Sacred Cross; and figured there
The five dear wounds our Lord did bear."

In the provision for masses in the Collegiate church of Biggar, founded by Malcolm, Lord Fleming, in 1545, there appears to be an indication of the great prominence obtained by these symbols at a period almost contemporaneous with these popular outbursts, there having been a regular mass appointed to be celebrated every Friday for the five wounds of Christ (Hunter's *Biggar and the House of Fleming*, p. 185). Whatever there may be in the consideration of these examples, the workmanship on the Slab is sufficiently simple in style, as to have belonged to almost any age.

On the Ancient Stone and Flint Instruments, &c., of the Borders, No. IV. By JAMES HARDY. With Illustrations by ROBERT MIDDLEMAS.

THE Plates, from the accurate drawings of Mr Middlemas, bring out so well the character of a new set of Prehistoric Implements, &c., with which members of the Club and others have furnished me, since No. III. appeared, that it is almost superfluous to dwell upon them, by giving minute descriptions. But as the forms of several of them are hitherto unknown to our district, it may be advisable to finish the series as particularly as when it commenced. On this occasion I shall follow the sequence of the figures on the plates, as it offers the advantage of immediate reference.

PLATE VIII.

FIG. 1. This has been a Celt of great size, strength, and weight, but it is broken at the butt end, to which it probably tapered. It is of greenstone, of a finely freckled dark and light gray, minutely mixed, and has been finely polished all over. It is convex on both faces, and is marked out as being almost parallel sided for a greater part of its length, or sub-oblong. The sides are rounded, with scarcely a side area. The faces are convexly and shortly sloped to a sharp edge; this cutting edge being slightly oblique. The side view is like Mr Evans' figure, No. 74, from Bridlington, which is from a greenstone celt. The length is $7\frac{1}{2}$, breadth at slope, $3\frac{1}{2}$; in middle, $3\frac{1}{4}$; at truncation, $2\frac{1}{2}$; thickness, $1\frac{1}{4}$ inches. Weight, 2lb. 12oz. From Morpeth, 1869. Sent by Mr William Topley, F.G.S.

FIG. 2. This Axe-hammer is of a coarsely granular porphyry, of pale red felspar and quartz. It has a rough pitted appearance, from the felspar having decomposed, and left the harder quartz to project. It must have been long exposed to the atmosphere to occasion this waste. It is rather a narrow elongated form of this kind of implement. The cutting end is blunt, sloped equally; the stone is rounded a little and gently sloped to the truncated end, which has been considerably battered down by blows, of which the dints are sufficiently conspicuous. The hollow for the handle is large, and nearly uniform in diameter, although widest at the two external openings. Length, $6\frac{1}{2}$ inches; (three from the axe-edge to the perforation; $1\frac{1}{4}$ diameter of the aperture; $1\frac{3}{4}$

from this to the blunt end). The breadth is from $2\frac{1}{4}$ to $2\frac{1}{2}$; thickness, $2\frac{1}{4}$ inches. Weight, 3lb. $2\frac{3}{4}$ oz. From Middle-town, in the parish of Stow. In the collection of Mr Robert Renton.

FIG. 3. This very symmetrical and finely polished Celt is of a very dark gray flint. It is smoothed all over, tapers to a point at the butt, has a side area, is not very convex; the faces slope to a sharp edge, without any abruptness; the edge is nearly equally rounded. Length, $5\frac{1}{2}$; extreme breadth, $2\frac{1}{2}$; thickness, $\frac{3}{4}$ inches. Weight, 12oz. It closely resembles, except in its broader cutting edge, Mr Evans' figure, No. 75, said to be from Caithness. I have a larger example in green jade from New Zealand. From the collection of the late Mr William Purves, of Linton Burnfoot, Rox.; gathered from the land. Furnished by Mr Lillie.

PLATE IX.

FIG. 1. This wedge-shaped Celt is of a brownish gray oxidised slate, which is dark grey when fresh, like that of other slate celts from Lauderdale. This is a broken implement, which appears to have been long exposed to the weather, and then ground afresh on the side area; where the striæ from friction still remain. It is characterised by a broad lateral area. The faces are flattish, and slope gradually to the edge, which is considerably oblique. Length, about 4; extreme breadth, $2\frac{1}{2}$ by $1\frac{1}{2}$ at the butt; thickness, $\frac{3}{4}$ inches. Weight, 8 oz. Found at Threeburnford, by Mr Robert Renton.

At the butt-end this probably, when entire, tapered to a conical apex, like a very beautiful entirely polished Celt of green slate, which Mr Alexander Leitch, of Fairneyside, found at Longyester, in East Lothian,—not very remote from Lauderdale; which he has kindly submitted to my inspection. This is prettily marked by a narrow band of white felspar at the sides, and which at the under edge forms a sort of margin or setting to the green slaty faces. One of the faces also has corresponding darker green bands of the slate itself; the other is less ornamented. The faces are flat, gradually tapered to a cutting edge, which has one of the corners more sloped than the other. It has a thick side area like the preceding. The apex is narrow, but blunt, formed with great care. Length, $4\frac{1}{2}$; Breadth, $2\frac{1}{2}$; thickness, $\frac{3}{4}$ inches. Weight, $7\frac{3}{4}$ oz. This is fresh as from the maker's hand.

FIG. 2. This Fibula, or Dress Ornament of polished Jet,

appears originally to have been an oblong piece, on which the simple but tasteful design has been wrought out. There is a larger central rounded square, with a large perforation; to which are attached laterally, two at each end, two half-berry like knobs; the outline of the whole being sub-oval. There are two deep grooves separating the protuberances at the ends from the central portion; and a still deeper notch divides each of the knobs. These grooves run continuously on both faces of the article; so that it might occasionally be attached to the dress by strings, although, no doubt, the perforation was the main fastener. Some rude lines in these grooves, shew the marks of the formative instrument, perhaps a flint. Although finely polished all over, the original scratches of the stone (?) with which it has been rubbed are still apparent. The interior of the central hole has not been fully smoothed off. The perforation appears to have been made from two opposite sides; the two openings are widest. The jet is now cracking into horizontal parallel layers, which are sub-divided into squares by other cracks at right angles. Length, $2\frac{1}{2}$; breadth, $1\frac{3}{4}$; diameter of the perforation, 1; thickness, $\frac{3}{4}$ inches. Had it remained entire this would have been a valuable object. It was found in April, 1877, near some camps on Cockburn Law, Berwickshire; it is not said whether or not, they are those surrounding Edin's Hold or Hall. Mr Robt. Renton is its present owner. It was entire when picked up, but the finder, with great stupidity, broke it into five pieces, to ascertain of what it was composed. It has been glued together, but several chips are wanting. The Rev. Canon Greenwell assures me that this form of dress ornament has not occurred to him, during his many investigations into prehistoric interments.

FIG. 3. Of this peculiar-shaped imperforated Stone-Axe, I do not find an engraved example. It is of a darkish gray mountain limestone, is flat, has the thinness of an axe, and has been ground all over. At the butt end there are two ears to aid in retaining it in its haft, and there is a shallow notch, as if for ornament, equidistant from the tip of each ear. Beyond the narrow portion, which would be occupied by the haft, the blade expands to nearly a broad semicircle, but one of the sides bulges more than the other. The flat faces have been carefully sloped to an edge. Length, 6; greatest breadth, 4; breadth at the ears, $2\frac{3}{4}$; at the neck, 2; thickness, $\frac{3}{4}$ inches. Weight, 1lb. 3oz. From Linton

Burnfoot, where it formed part of the collection gathered from the land by the late Mr William Purves. Furnished by Mr Lillie.

FIG. 4. This is a very fine, thin, oblong-oval piece of flint of a deep brown tortoise-shell colour, with some rounded specks of gray. The flint of this and the next is almost identical in aspect. It belongs to the class of knives treated of by Mr Evans, in his "Ancient Stone Implements of Britain," p. 302, etc. It has been formed of one large flake, which has been repeatedly chipped on both sides to thin it. The edges have been more minutely chipped all round to sharpen them, and excepting on one side and part of one end, have been ground smooth. A flaw or hiatus in the ground end has been chipped. This would make a good butter, or cheese, or tallow slicer. Length, 4; breadth, $2\frac{1}{2}$; thickness, $\frac{1}{8}$ inches. Weight, $3\frac{1}{2}$ oz. This is from Mr R. Renton's collection, who notes that it was "found by A. Kerr, in a field on the farm of Butterlaw, near Coldstream, about 1867."

FIG. 5 is a good example of a duck-bill Scraper. It is of a fine deep brown coloured flint, mixed with yellowish gray. It is rather coarsely chipped all round the edges; the butt end has also been chipped. A few longitudinal flakes have been struck from the one face, but the other has the smooth natural fracture. Length, $2\frac{1}{2}$; greatest breadth, $1\frac{1}{2}$; smaller end, $\frac{3}{4}$ inches. I have selected this as the best of several other chipped flints gathered by Mr Renton at Threeburnford, in Lauderdale, 1876-7.

PLATE X.

FIG. 1 is a fragment of an Urn obtained in November, 1874, at Elliesheugh, on the farm of Cliftoncote, in the parish of Hownam, and has already been described by Mr Thomas Craig, in the present vol. of the "Proceedings," p. 130. The design is a sort of V-shaped ornament, either upright or reversed, which has been impressed on the soft clay of the urn, by portions of plaited thong or rush. A plaited line had also been carried all round below the lip of the urn, and above the zig-zag attempts at decoration. This line is shewn in the figure, which has been drawn reversed. The shot-like holes in the thickness of the rim, as well as on the interior surface of the urn, appear to be the result of design. The holes in the inside are represented on the plate. They are shallow, and have been made by a piece of blunt stick, perhaps.

FIG. 2. This long, semi-elliptical, finely tapered, and completely polished Celt, is formed of a light grey transition slate, and is almost as fresh as when it came from the hands of its maker, and still bears the scratches of the grinding process. The sides are parallel for two thirds of its length, and it is slightly narrower towards the cutting edge for about an inch. It is convex on both faces; the faces slope at some length gradually to an edge, which is not very sharp; one of the slopes is more convex than the other; the edge is scarcely oblique. The length is 9 inches; the breadth before the edge is $3\frac{3}{4}$, and farther up 3 inches; it keeps this width for one third of its length, and then gradually tapers to a blunt peak, which is polished. It has a narrow lateral area. Thickness about $1\frac{1}{2}$ inch. Weight, 1lb. 11 $\frac{1}{2}$ oz. Found at Lumsdean, in the parish of Coldingham, where there are many old British camps. From the collection of the late Mr Andrew Wilson of Coldingham. It is alluded to in the present vol. at p. 162.

FIG. 3. This miniature Celt, so like a small wedge, of bluish grey greywacke or transition slate was found in a field near the wooded ravine called Red Clews Cleugh. In former years, it was a heathery moor, and it adjoins a field on Penmanshiel farm, that yielded some of the wrought flints previously illustrated in the "Proceedings" of the Club. It is flattish and thin, and although scratched and chipped by agricultural operations, it still carries the fine striæ of its initial formation. From the two incisions in its sides, it appears to have been intended to be mounted as an axe, for chipping. The faces have been abruptly sharpened, and the edge is fine. The butt end has been blunt and conical. The side area is partly flat, partly rounded. Length, 3 inches; $1\frac{1}{4}$ to the sinus; and from the other end of the sinus to the butt, 1 inch; breadth, $1\frac{3}{4}$, and above the sinus 1 inch. Weight, 2 $\frac{1}{2}$ ounces. The use of this tiny chopper is unknown. Found by Mr John Hood of Townhead.

Two other small wedge-like implements of polished transition slate, with the sharpened ends somewhat oblique, the butt end truncated, with the sides straight, not incised for a handle, were found in 1877, on Foulden West Mains Moor. One of these was broken; the other is in the possession of the tenant, Mr Craw. It still has the fine striæ caused by grinding it smooth. Length, 3; greatest breadth, $1\frac{3}{4}$; at the butt $\frac{3}{4}$ inches. The weight was not ascertained.

*An Account of a Silver Coin of the Emperor Charles V.
found at Kelso.* By JAMES HARDY.

MR JOHN THOMSON affords me the opportunity of noticing an interesting Spanish silver coin, which was found by a labourer at Kelso, in April, 1879. It is of the size of the interior ring of a two shilling piece, and the weight is that of a modern shilling. It is marked M.I., which may signify the coin termed *media pecata*, or half a pecata, which was valued at two reals; and this seems to be pointed out by two elevated pellets in the centre of the piece. On the obverse is an oblong shield, beneath an open crown, bearing the arms of Castille (a castle) and Leon (a lion passant) quarterly. According to Camden, when these two kingdoms were joined, this was the first time that ever arms were borne quartered. On the reverse are two crowned pillars standing amid the waves of the sea; and the legend in separate portions between and across the pillars: PIV SVI TR, which may be a contracted Latin sentence, meaning that "The godly person regulates his life;" but this is uncertain. The obverse inscription round the margin reads: CAROLVS ET IOANA REGES; which is completed on the reverse: HISPANIARVM ET INDIARVM, *i.e.*, Charles and Joanna, rulers of the Spains and the Indies. Charles, grandson of Ferdinand and Isabella, became king of Castille and Arragon in 1516, as Charles I., in right of his mother Joanna, who being fatuous was unable to exercise the functions of royalty. The scrupulous Spaniards would only permit Charles to reign conjointly with his parent. He was declared king by the Cortes in 1518, and was elected Emperor as Charles V. in 1519. Joanna died 4th April, 1555. The viceroyalty of New Spain was established in 1530; consequently the coin was struck between these two periods. Judging from its date, it was probably brought to Kelso by the Spaniards in the invading army of the Earl of Hertford, who, in September, 1545, led the attack on Kelso Abbey, and expelled the Scots. In this affair three or four Spaniards were killed by the "Scottes hacbutiers." Besides these there were two other companies of Spaniards attached to this army. (Innes's Sketches of Early Scotch History, p. 199; Contemporary Account of Hertford's Expedition). This coin, therefore, while it commemorates a local incident, has a tale to tell of the eventful age when Charles

V., Francis I., and Henry VIII. controlled the destinies of Europe; the age also of the Reformation, and the discovery of America, the great sources of modern enlightenment and progress.

Donations to the Berwickshire Naturalists' Club, from Scientific Societies, &c., 1878.

BOSTON, U.S.A. Proceedings of the Boston Natural History Society, Vol. xix., Part i. and ii., Oct. 1879—May, 1877, 1877, 8vo. *The Society.*

————— Memoirs of the Boston Society of Natural History, Vol. ii., Part iv., No. vi. 1878, 4to. *Ibid.*

CARDIFF. Report and Transactions of the Cardiff Naturalists' Society, Vol. ix., 1877. London, 1878, 8vo. *The Society.*

CROYDON. Eighth Report of the Proceedings of the Croydon Microscopical and Natural History Club. 1878, 8vo.

The Club.

————— The Meteorology of Croydon, by Mr George Corden. 1878, 8vo. *Ibid.*

EDINBURGH. Proceedings of the Royal Physical Society. Sessions, 1877-78. 1878, 8vo. *The Society.*

————— Transactions and Proceedings of the Botanical Society, Vol. xiii., Part ii. 1878, 8vo. *The Society.*

ESSEX, MASS., U.S.A. Bulletin of the Essex Institute, Vol. ix., 1877. 1878, 8vo. *The Institute.*

GLASGOW. Proceedings of the Philosophical Society of Glasgow, Vol. xi., No. 1. 1878, 8vo. *The Society.*

————— Proceedings of the Natural History Society of Glasgow, Vol. iii., Part iii. 1878, 8vo. *The Society.*

HAWICK. Transactions of the Hawick Archæological Society, 1878, 4to. *The Society.*

LEEDS. Annual Report for 1877-78 of the Leeds Philosophical and Literary Society. 1878, 8vo. *The Society.*

LIVERPOOL. Proceedings of the Literary and Philosophical Society of Liverpool, 1877-78, No. xxxii. 1878, 8vo.

The Society.

LONDON. Proceedings of the Geological Association, Vol. v., Nos. 7, 8. 1878, 8vo. *The Association.*

————— Annual Report of Ditto for 1878. *Ibid.*

————— Journal of the Anthropological Institute of Great Britain and Ireland, May, 1878. 8vo. *The Institute.*

PLYMOUTH. Annual Report and Transactions of the Plymouth Institution and Devon and Cornwall Natural History Society, Vol. vi., Part ii., 1877-8. 1878, 8vo. *The Institution.*

WASHINGTON, U.S.A. List of the Publications of the Smithsonian Institution, July, 1877. 1877, 8vo.

The Smithsonian Institution.

The following Publications of the United States Geological and Geographical Survey of the Territories have been received from Dr F. Von. Hayden, State Geologist:—

Bulletin of the U. S. Geological and Geographical Survey of the Territories, Vol. iv., Nos. 2 and 3. 1878, 8vo.

Miscellaneous Publications: Bibliography of North American Invertebrate Paleontology. 1878, 8vo.

Illustrations of Cretaceous and Tertiary Plants of the Western Territories of the United States. 1878, 4to.

Geological and Geographical Atlas of Colorado, and Portions of the adjacent Territory, by F. V. Hayden, U.S., Geologist in charge. 1877, imp. folio.

Map of the Upper Geyser Basin on the Upper Madison River, Montana; Map of the Lower Geyser Basin; Map of the Sources of the Snake, with its Tributaries, together with portions of the Headwaters of the Madison and Yellowstone. By Gustavus R. Bechler.

WELSHPOOL. Collections, Historical and Archæological, relating to Montgomeryshire and its Borders, Vol. xi., Parts ii., iii.; Vol. xii., Part i. 1878-9. *From the Powysland Club.*

Note on the Papedy Family.

SINCE the article on the Papedy family was printed off, a more correct edition of the Chartulary of the Cistercian Priory of Coldstream has appeared, edited by the Rev. Charles Rogers, LL.D. (London, Grampian Club, 1879). Almost the only new item about the family there supplied is that "Stephen Papdy" was steward (dapifer) to Patrick, first of the name, Earl of Dunbar (1182-1232), during which period he witnesses a confirmation to the nuns (No. 4), of a carucate of land at Scaithemor, as Adam the son of Osbert held it. There was no David Papedy, *see* p. 484, that being a mistake of the former editor of the charters. The original words are "Domino Papedy"—the Lord or Sir Papedy, seneschall for the time being.—J. H.

Rain Fall at Glanton Pyke, Northumberland, in 1878, communicated by FREDK. J. W. COLLINGWOOD, Esq.; and at Lilburn Tower, Northumberland, communicated by Mr JOHN DEAS.

GLANTON PYKE.				LILBURN TOWER.			
			Inches.				Inches.
January	..	..	3.14'0	January	..	..	2.378
February	..	..	1.47'5	February	..	..	2.265
March	..	..	1.39'5	March	..	..	1.305
April	..	..	2.19'0	April	..	..	1.955
May	..	..	2.18'5	May	..	..	2.465
June	..	..	2.64'0	June	..	..	1.930
July	..	..	0.92'5	July	..	..	1.060
August	..	..	5.15'5	August	..	..	3.737
September	..	..	2.79'5	September	..	..	2.832
October	..	..	2.71'0	October	..	..	3.009
November	..	..	7.10'5	November	..	..	9.448
December	..	..	1.65'0	December	..	..	7.126
Total			33.36'5	Total			39.510
Rain Gauge—Diameter of Funnel, 8in. ; height of Receiver above ground, 4ft. 3½in. ; above sea level, 517ft.				Rain Gauge—Diameter of Funnel 10in. square ; height of Top above ground, 6ft. ; above sea level, 300ft.			

Places of Meeting for the Year 1879.

Reston	..	..	..	Wednesday, May 14.
Morebottle	..	..	..	June 25.
Alnmouth	..	..	..	July 30.
Marchmont	..	..	..	Aug. 27
Durham	..	..	..	Sept. 24
Berwick	..	..	..	Oct. 15

General Statement.

THE INCOME AND EXPENDITURE have been :—

	INCOME.	£	s.	d.
Balance from last year	1	2	10½
Arrears received	18	12	0
Entrance Fees	17	0	0
Subscriptions	68	2	0
<hr/>				
				£104 16 10½

EXPENDITURE.

Paid Mr Reid for printing Illustrations				
for Dr Bruce's Paper ..	..	3	5	0
Printing ..	..	60	4	10½
Expenses at Meetings ...	..	7	11	3
Postage and Carriage ..	..	16	3	10
Berwick Salmon Company ..	..	6	18	11
<hr/>				
		94	3	10½
Balance in hand ..	..	10	13	0
<hr/>				
				£104 16 10½

BERWICKSHIRE NATURALISTS' CLUB.

LIST OF MEMBERS, APRIL, 1879.

	Date of Admission.
1. Francis Douglas, M.D., Woodside, Kelso	July 30, 1834.
2. David Milne Home, L.L.D., F.R.S.E., &c., Milnegraden House, by Coldstream, and 10, York Place, Edinburgh	Sept. 21, 1836.
3. Frederick J. W. Collingwood, Glanton Pyke, Alnwick	May 6, 1840.
4. Jonathan Melrose, Coldstream	" "
5. David Macbeath, Old Charlton, Kent	Dec. 16, "
6. John B. Boyd, Cherrytrees, Yetholm	Sept. 18, 1841.
7. James Tait, W.S., Edenside, Kelso	July 26, 1843.
8. William Brodrick, Little Hill, Chudleigh, South Devon	Sept. 30, "
9. John Turnbull, 58, Frederick Street, Edinburgh	" "
10. Ralph Carr-Ellison, Dunstan Hill, Gateshead	Sept. 20, "
11. Henry Gregson, Lowlynn, Beal	May 3, 1846.
12. Rev. Hugh Evans, Scremerston, Berwick	" "
13. The Right Hon. the Earl of Home, Hirsell, Coldstream, and 6, Grosvenor Square, London, W.	Oct. 20, 1847.
14. Robert Hood, M.D., 5, Salisbury Road, Newington, Edinburgh	May 3, 1848.
15. Rev. Samuel Arnot Fyler, Cornhill	June 25, 1849.
16. Rev. William Darnell, Bamburgh	" "
17. David Francis S. Cahill, M.D., Berwick	Oct. 18, "
18. William H. Logan, 25, Royal Circus, Edinburgh	May 1, 1850.
19. John Craster, Craster Tower, Lesbury	Sept. 18, "
20. William Dickson, Sea-bank House, Alnmouth	Oct. 15, 1851.
21. Matthew J. Turnbull, M.D., Coldstream	June 30, 1852.
22. Sir John Marjoribanks, Bart., Lees, Coldstream	" "
23. Rev. George Selby Thomson, Acklington	" "
24. William Stevenson, Dunse	Sept. 7, 1853.
25. William B. Boyd, Ormiston House, Kelso	Oct. 12, "
26. Charles Stuart, M.D., Chirnside	Aug. 16, 1854.
27. Rev. F. R. Simpson, North Sunderland, Chathill	" "
28. The Ven. Archdeacon George Hans Hamilton, Egling- ham, Alnwick	Oct. 25, "
29. Charles Rea, Halterburn	June 23, "

30. George Culley, Fowberry Tower, Belford ..	..	June 23, 1854.
31. William Marjoribanks, Lees, Coldstream ..	..	" "
32. Rev. Charles Thorp, Ellingham, Chathill ..	..	Jan. 31, 1856.
33. Charles Watson, Dunse ..	..	Oct. 20, "
34. Rev. Thomas Leishman, D.D., Linton, Kelso ..	..	" "
35. George P. Hughes, Middleton Hall, Wooler ..	..	" "
36. Frederick R. Wilson, Alnwick ..	..	June 25, 1857.
37. Sir Dudley Coutts Marjoribanks, Bart., M.P., Upper Brook Street, Park Lane, London ..	..	July 30, "
38. Patrick Thorp Dickson, London ..	..	Oct. 28, "
39. William Sherwin, The Grange, Farnborough, Hants ..	..	" "
40. Rev. Thomas Procter, Tweedmouth ..	..	" "
41. Matthew T. Culley, Coupland Castle, Wooler ..	..	" "
42. John Clay, Berwick.. ..	..	" "
43. Rev. J. W. Dunn, Warkworth ..	..	" "
44. John Marshall, M.D., Chatton Park, Belford ..	..	June 24, 1858.
45. James Robson Scott, M.D., Belford, Yetholm, and 27, Abercromby Place, Edinburgh ..	..	" "
46. Rev. John H. Walker, Greenlaw ..	..	Sept. 22, "
47. John Wheldon, 58, Great Queen Street, Lincoln's Inn Fields, London, W.C. ..	..	Oct. 27, "
48. Middleton H. Dand, Hauxley Cottage, Acklington ..	..	June 28, 1859.
49. Rev. Aislabie Procter, Doddington, Wooler ..	..	" "
50. Stephen Sanderson, Berwick ..	..	" "
51. James Maidment, 25, Royal Circus, Edinburgh ..	..	" "
52. Dennis Embleton, M.D., Newcastle ..	..	" "
53. Charles B. Puleine Bosanquet, Rock, Alnwick ..	..	Sept 29, "
54. Rev. John S. Green, Wooler ..	..	May 31, 1860.
55. Robert Douglas, Berwick ..	..	June 28, "
56. John Riddell, St. Ninian's, Wooler ..	..	Sept. 13, "
57. Watson Askew, Pallinsburn, Coldstream ..	..	Oct. 11, "
58. Rev. Edward A. Wilkinson, Tudhoe Vicarage, Spenny- moor, Durham ..	..	May 30, 1861.
59. Robert H. Clay, M.D., 4, Windsor Villas, Plymouth ..	..	" "
60. J. A. H. Murray, LL.D., Mill Hill, Hendon, Middlesex, N.W. ..	..	June 27, "
61. Charles Douglas, M.D., Woodside, Kelso ..	..	" "
62. Archibald Campbell Swinton, LL.D., F.R.S.E., Kim- merghame, Dunse ..	..	" "
63. Rev. Patrick G. McDouall, Cosgrove Rectory, Stony Stratford ..	..	July 25, "
64. Thomas Brewis, 14, Cumin Place, Edinburgh ..	..	" "
65. Rev. W. L. J. Cooley, Ponteland, Newcastle ..	..	" "
66. Rev. William Greenwell, F.S.A., Durham ..	..	" "
67. Sir George H. Scott Douglas, Bart., M.P., Springwood Park, Kelso, and 50, Thurloe Square, S.W. ..	..	Aug. 29, "
68. William Cunningham, Coldstream ..	..	Sept. 26, "

69. Thomas Friar, Grindon Ridge, Norham	Sept. 26, 1861.
70. James Bowhill, Ayton	" "
71. Rev. John Scarth, Holy Trinity Vicarage, Milton-next-Gravesend	" "
72. Septimus H. Smith, Norham	" "
73. John Paxton, Norham	" "
74. Charles Anderson, Jedburgh	June 26, 1862.
75. Capt. Henry R. Hardie, Penquit, Torquay	" "
76. John Scott Dudgeon, Longnewton Place, St. Boswells	" "
77. William Elliot, Jedburgh	" "
78. Rev. J. C. Bruce, LL.D., Framlingham Place, Newcastle	July 31, "
79. John Tate, Barnhill, Acklington	" "
80. Robert Crossman, Cheswick House, Beal	" "
81. Rev. Peter Mearns, Coldstream	" "
82. William Crawford, Dunse	Aug. 15, "
83. George Rea, Middleton House, Alnwick	" 28, "
84. Sir Walter Elliot, K.C.S.I., LL.D., F.R.S., F.L.S., Wolfelee, Hawick	June 25, 1863.
85. John Orde, Nisbet, Kelso	" "
86. William Dickson, Canaan Lodge, Edinburgh	" "
87. Thomas Robertson, Alnwick	" "
88. Alexander Curle, Melrose	" "
89. John Edmund Friar, Grindon Ridge, Norham	" "
90. William Chartres, Summerhill, Ayton	" "
91. Francis Russell, Sheriff Substitute, Jed-bank, Jedburgh	" "
92. William Hilton Dyer Longstaffe, F.S.A., Gateshead	" "
93. Robert Middlemas, Alnwick	" "
94. James Hardy, Oldcambus, Cockburnspath	" "
95. Rev. Edward L. Marrett, Lesbury, Bilton	July 30, "
96. Thomas Clutterbuck, Warkworth	" "
97. Thomas Tate, Alnwick	" "
98. Rev. Adam Davidson, Yetholm	" "
99. Lord Henry Kerr, Huntly Burn, Melrose	" "
100. Robert Brown, Littlehoughton, Chathill	Sept. 29, "
101. Rev. John F. Bigge, Stamfordham, Newcastle	May 26, 1864.
102. Christopher S. Bell, Stanwick, Darlington	Sept. 29, "
103. Robert Wilson, M.D., Alnwick	" "
104. J. Towlerton Leather, F.S.A., Middleton Hall, Belford	" "
105. Colville Brown, M.D., Berwick	May 25, 1865.
106. Rev. James Farquharson, Selkirk	June 29, "
107. Henry Richardson, M.D., R.N., Castle Terrace, Berwick	" "
108. Thomas Allan, Horncliffe House, Berwick	" "
109. Frederick Lewis Roy, Nenthorn, Kelso	July 27, "
110. William Watson Campbell, M.D., Dunse	" "
111. Robert Carr Fluker, M.D., Berwick	May 31, 1866.
112. Lieut.-Col. J. P. Briggs, Bonjedward House, Jedburgh	July 26, "

113. James Smail, Galashiels	..	..	July 26, 1866.
114. Rev. Manners Hamilton Graham, Maxton, St Boswells	..	..	Aug. 30, ..
115. J. R. Appleton, F.S.A., Western Hill, Durham	..	..	Sept. 26, 1867
116. Rev. Peter McKerron, Kelso	..	..	" "
117. Alexander Dewar, M.D., Melrose	..	..	" "
118. William Currie, Linthill, St. Boswells	..	..	" "
119. William Blair, M.D., Jedburgh	..	..	" "
120. Major the Hon. R. Baillie Hamilton, M.P., Langton House, Dunse; and 41, Brook Street, London, W.	..	..	" "
121. Alex. Roy Borthwick, Ladiesyde Lodge, Melrose	..	..	" "
122. His Grace the Duke of Northumberland, Alnwick Castle	..	..	June 25, 1868.
123. Robert G. Bolam, Berwick	..	..	Sept. 25, ..
124. Rev. J. Elphinstone Elliot, Whalton, Newcastle	..	..	" "
125. James Brunton, Broomlands, Kelso	..	..	" "
126. Charles Bertram Black, 38, Drummond Place, Edinburgh..	..	..	" "
127. Capt. James F. Macpherson, Melrose	..	..	" "
128. Francis Holland, Alnwick	..	..	" "
129. James Heatley, Alnwick	..	..	" "
130. C. H. Cadogan, Brencelburn Priory, Morpeth	..	..	" "
131. Henry Wentworth Acland, M.D., Regius Professor of Medicine, Oxford..	..	..	" "
132. Robert Romanes, Harryburn, Lauder	..	..	Sept. 30, 1869.
133. William B. Robertson, M.D., 1, Oxford Villa, West Dulwich	..	..	" "
134. Thomas Broomfield, Lauder	..	..	" "
135. John Bolam, Alnwick	..	..	" "
136. Rev. William I. Meggison, South Charlton, Chathill	..	..	" "
137. John Dunlop, Berwick and Norham	..	..	Sept. 29, 1870.
138. Pringle Hughes, Middleton Hall, Wooler..	..	..	" "
139. Rev. James Noble, Castleton Manse, Newcastleton, Carlisle	..	..	" "
140. James Purves, Berwick	..	..	" "
141. George L. Paulin, Berwick	..	..	" "
142. Rev. David Paul, Roxburgh, Kelso	..	..	" "
143. Thomas Patrick, Berwick	..	..	" "
144. Rev. John George Rowe, Berwick	..	..	" "
145. John Scott, Berwick	..	..	" "
146. John Pringle Turnbull, Alnwick	..	..	" "
147. Rev. E. B. Trotter, St. Michael's Vicarage, Alnwick..	..	..	" "
148. James Wood, Galashiels	..	..	" "
149. Matthew Young, Berwick	..	..	" "
150. Rev. Thomas Brown, F.R.S.E., 16, Carlton Street, Edinburgh	..	..	May 11, 1871.
151. Rev. Thomas Rogers, Durham	..	..	Sept. 26, ..
152. Rev. Robert Paul, Dollar	..	..	" "
153. Rev. T. S. Anderson, Crailing, Kelso	..	..	" "

154. Rev. David W. Yair, Frith Manse, Finstown, Thurso	Sept. 26, 1871.
155. John Philipson, Victoria Square, Newcastle "
156. Rev. Ambrose Jones, Stannington, Cramlington "
157. Andrew Scott, Glen Douglas, Jedburgh "
158. W. E. Otto, Jed-neuk, Jedburgh "
159. Rev. L. J. Stephens, Longhoughton, Alnwick "
160. William Weatherhead, Berwick "
161. Lieut. James H. Scott Douglas, Springwood Park, Kelso "
162. Rev. H. E. Henderson, Alwinton, Morpeth "
163. Alexander James Main, M.D., Alnwick "
164. Rev. John Dixon Hepple, Branxton, Cornhill "
165. Thomas Arkle, Highlaws, Morpeth	.. .. Sept. 26, 1872.
166. James T. S. Doughty, Ayton "
167. Capt. J. Carr-Ellison, Hedgeley, Alnwick; and 16, Rutland Square, Edinburgh "
168. W. T. Hindmarsh, Alnwick "
169. Major James Paton, Ferniehirst, Jedburgh "
170. Henry A. Paynter, Alnwick "
171. Capt. Thompson, Walworth Hall, Darlington "
172. John Hutton Balfour, M.D., F.R.S., &c., Emeritus Professor of Botany, Inverleith House, Edinburgh	.. .. July 30, 1873.
173. Rev. Evan Rutter, Spittal, Berwick	.. .. Sept. 25, "
174. Rev. Hastings M. Neville, Ford Rectory, Cornhill "
175. Rev. James Henderson, Ancroft, Beal "
176. Professor A. Freire-Marreco, Neville Hall, Newcastle "
177. Charles M. Wilson, Bridge of Allan "
178. Capt. David Milne Home, M.P., Paxton House, Berwick; and 38, Queen's Gate Terrace, London, S.W. "
179. Rev. William Stobbs, Gordon "
180. James Nicholson, Murton, Berwick "
181. Rev. Joseph Waite, Vicarage, Norham "
182. Rev. Beverly S. Wilson, Duddo, Norham	.. .. Sept. 24, 1874.
183. Capt. Charles Gandy, Barndale, Alnwick "
184. Robert Gray, F.R.S.E., 13, Inverleith Row, Edinburgh "
185. Robert F. Logan, Spylaw House, Colinton; and 4, Picardy Place, Edinburgh "
186. Lieut.-Col. William Crossman, C.M.G., R.E., Horse Guards, London "
187. Capt. F. M. Norman, R.N., Cheviot House, Berwick "
188. William Willoby, Berwick "
189. James Hastie, Edrington, Berwick; and 305, High Street, Wapping, London, E. "
190. George Muirhead, Paxton, Berwick "
191. Thomas Gordon, Middlethird, Gordon "
192. J. B. Kerr, Commercial Bank, Kelso "
193. Edward Liddell, Morris Hall, Norham "
194. William B. Elliot, Benrig House, St. Boswells; and 8, Cadogan Place, London "

195. Samuel Grierson, M.D., District Asylum, Melrose	...	Sept. 24, 1874.
196. Major John H. F. Home, Bassendean House, Gordon; and The Mount, Coldingham	Sept. 29, 1875.
197. Matthew G. Crossman, Berwick	" "
198. John Freer, Melrose	" "
199. Capt. J. A. Forbes, R.N., West Coates House, Berwick	..	" "
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559

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INDEX OF BIRDS.

- Auk, Little, 54, 133, 159, 195, 497, 502, 513, 520, 538.
 Bittern, Common, 51, 528.
 — Little, 195.
 Blackbird, 121, 143, 503, 512, 528.
 Black Cock or Black Grouse, 187, 197, 506, 513, 536.
 Brambling, *see* Finch, Mountain.
 Bullfinch, 144, 504.
 Bunting, Black-headed, 121.
 — Common, 504.
 — Snow, 50, 136, 154, 499.
 Buzzard, Common, 142, 190, 196, 353, 457 532.
 — Honey, 139, 153, 156, 190.
 — Rough-legged, 48, 100, 111, 139, 142, 155, 178, 182, 190, 195, 353, 456, 461 503.
 Capercaillie, 354, 499.
 Chaffinch, 100, 192, 504, 512, 535.
 Chiff-chaff, 503.
 Coot, 52, 537.
 Cormorant, Common, 54, 152-4, 184.
 — Green or Shag, 55, 122.
 Crane, Corn or Landrail, 131, 157, 508.
 — Spotted, 52, 354, 497, 529.
 Creeper, 536.
 Crossbill, 193, 197.
 Crow, Carrion, 50, 121.
 — Hooded, 50, 154, 182, 193, 258, 495, 526.
 Cuckoo, 103, 104, 131, 153, 193, 208, 400, 401.
 Cushat, *see* Wood-Pigeon.
 Curlew, 51, 152-4, 208, 537.
 Dabchick, *see* Grebe, Little.
 Dipper, 49, 100, 138, 143, 179, 197, 407.
 Diver, Black-throated, 54, 158, 197, 354, 502.
 — Great Northern, 54, 56, 354.
 — Red-throated, 54, 111, 180, 354, 532.
 Dotterel, 51, 146, 506.
 Duck, Common Wild or Mallard, 133, 152, 154, 180, 498, 513, 537.
 — Eider, 53, 122, 152, 153, 514.
 — Golden Eye, 53, 111, 537.
 — Hybrid, 525.
 — King, 53.
 — Long-tailed, 53, 56, 133, 157, 183, 197 354, 498.
 — Pintail, 53, 501.
 — Pochard, 196, 355, 498, 509.
 — Scaup, 53, 355, 498.
 — Shoveller, 147, 157, 501, 525.
 — Teal, 53, 508.
 — Tufted, 53, 133 180, 521, 537, 538.
 — Wigeon, 53, 147, 498, 513.
 Dunlin, 52, 181, 537.
 Eagle, Golden, 185, 196, 531.
 — White-tailed, 48, 186, 189, 196, 198.
 Falcon, Peregrine, 48, 49, 141, 142, 155.
 Fieldfare, 49, 135, 154, 191, 195, 353, 503, 512, 535.
 Finch, Mountain or Brambling, 136, 144, 504, 535.
 Flycatcher, Pied, 196, 496, 503.
 — Spotted, 120.
 Gadwall, 500.
 Goatsucker, or Night Jar, 122, 145, 193, 197, 505, 520.
 Godwit, Bar-tailed, 52.
 — Black-tailed, 52.
 Goldfinch, 136, 192, 494, 496.
 Goosander, 54, 134, 147, 158, 180, 185, 196, 426, 509, 532, 537.
 Goose, Bean, 52.
 — Bernicle, 52, 525.
 — Brent, 52, 498, 500, 513, 537.
 — Canada, 147, 157.
 — Domestic, 180.
 — Egyptian, 53, 500.
 — Grey-lag, 52.

- Goose, Pink-footed, 52, 498, 500.
 — White-fronted, 52, 110, 183, 500, 522.
 Goshawk, 155.
 Grebe, Eared, 54, 133, 158.
 — Great Crested, 54, 501, 526, 530.
 — Little, 54, 262, 513, 530, 538.
 Greenfinch, 504.
 Greenshank, 52, 109, 262, 497, 499, 514.
 Grouse, Red, 197, 506, 536.
 Guillemot, Black, 54.
 — Common, 54, 158.
 — Ringed, 54, 148.
 Gull, Black-headed, 55, 104, 152, 154, 187, 531.
 — Common, 55, 188.
 — Glaucous, 55, 159, 184, 497, 526.
 — Great Black-backed, 55, 188.
 — Herring, 104, 188.
 — Kittiwake, 55.
 — Lesser Black-backed, 55.
 — Little, 55, 522.
 — Sabine's, 355.
 Gulls, 538.
 Harrier, Hen, 140, 198, 457, 532.
 — Marsh, 48.
 Hedge-Sparrow, 503, 512, 526.
 Hen, Domestic, 193.
 Heron, Common, 51, 146, 152-4, 537.
 — Great White, 51.
 Hoopoe, 157, 179, 532.
 Jackdaw, 100, 103, 121, 144.
 Jay, 136, 156, 197, 528.
 Kestrel, 120, 142, 146, 457, 536.
 Kingfisher, 50, 137, 145, 179, 197, 353, 499, 528, 536.
 Knot, 52, 499.
 Landrail, *see* Crake Corn.
 Lapwing, 51, 104, 152, 154, 195, 208, 536.
 Lark, Shore, 50.
 — Sky, 100, 181, 208, 504, 536.
 — Wood, 192.
 Linnet, Mountain or Twite, 197, 496.
 Magpie, 121, 136.
 Martin, Common, 47, 153.
 — Sand, 49, 131.
 Merganser, Red-breasted, 53, 112, 158.
 Merlin, 48, 49, 146, 178, 183, 197, 525, 532.
 Missel Thrush, 101, 397, 503.
 Night Jar, *see* Goatsucker.
 Nightingale, 446.
 Nuthatch, 157.
 Osprey, 178, 182, 197, 426, 440.
 Ousel, Ring, 153, 191, 197, 400, 409.
 Owl, Barn, 156, 183.
 — Brown or Tawny, 100, 120, 156, 498, 536.
 — Long-eared, 120, 156, 456, 471.
 — Short-eared, 48, 49, 140, 156, 178, 196, 456, 461, 495.
 Oyster-Catcher, 51, 122.
 Pallas' Sand Grouse, 51.
 Partridge, 50, 145, 506, 513.
 Pastor, Rose-coloured, 495, 522.
 Petrel, Fulmar, 55.
 — Stormy, 55, 159.
 Phalarope, Grey, 52.
 — Red-necked, 52.
 Pheasant, 50, 145, 194, 514.
 Pipit, Meadow, 49, 504, 401.
 — Pennsylvanian, 50.
 — Rock, 49.
 — Tree, 144.
 Plover, Green, *see* Lapwing.
 — Grey, 51, 497.
 — Golden, 51, 122.
 — Ringed, 51, 260, 497, 537.
 Puffin, 54.
 Quail, 181, 194, 198, 496, 506.
 Rail, Water, 52, 111, 179, 497, 500, 523, 529, 532.
 Raven, 179, 495, 505, 527.
 Razor-bill, 54, 122.
 Redbreast, 100, 101, 503.
 Redshank, 8, 51, 131, 152-4, 208, 497.
 Redstart, Black, 156.
 — Common, 49, 131, 136, 198.
 Redwing, 49, 125, 191, 503, 512, 535.
 Ring-Dove, *see* Wood-Pigeon.
 Ring-Dotterel, *see* Plover, Ringed.
 Rockdove, 50, 134.
 Rook, 100, 101, 102, 103, 106, 135, 259, 401, 512, 536.
 Ruff and Reeve, 52, 195.
 Sanderling, 51, 52.
 Sandpiper, Common, 51, 131, 138.
 — Curlew, 52.
 — Green, 51, 109, 131, 138, 157, 196, 354, 508, 514, 528.
 — Purple, 52.
 Scoter, Common, 53, 76, 355, 501.
 — Velvet, 53, 75, 355, 501.
 Shelldrake, 53, 147, 497.
 Shrike, Grey, 112, 140, 156, 196, 524.
 — Red-backed, 49, 197, 532.
 Shag, *see* Cormorant, Green.
 Shearwater, Greater, 502.

- Shearwater, Manx, 23, 502.
 Siskin, 136, 192, 197, 496, 536.
 Skua, Buffon's, 159.
 — Common, 55.
 — Pomerine, 55.
 — Richardson's, 55, 110, 159.
 Skylark, *see* Lark, Sky.
 Smew, 53, 157, 184, 197.
 Snipe, Common, 52, 104, 198, 498, 514, 524, 536.
 — Great, 109, 262.
 — Jack, 52, 198, 536.
 — Sabine's? 261.
 Solan Goose, or Gannet, 55, 153, 154, 196.
 Sparrow-hawk, 120, 536.
 Sparrow, Common, 143, 503, 535.
 — Tree, 139, 495.
 Spoonbill, 51.
 Starling, 134, 144, 397, 504, 512.
 Stint, Little, 52.
 Stock-dove, 135, 354, 499, 528.
 Stone-chat, 121, 154, 191.
 Swallow, 49, 145, 153, 154, 393, 429.
 Swan, Bewick's, 53, 512.
 — Hooper, 53.
 — Polish, 511.
 — Wild, 104, 529.
 Swift, 153.
 Tern, Black, 55, 497.
 — Lesser, 55, 497, 522.
 — Sandwich, 55.
 Thrush, Song, 100, 121, 503, 512.
 Thrush, White's, 518.
 Titmice, 121, 503, 512, 535.
 Titmouse, Cole, 136, 535.
 — Greater, 136.
 — Long-tailed, 136.
 Turnstone, 51.
 Turtle-dove, 50, 353, 520.
 Twite, *see* Linnet, Mountain.
 Wagtail, Grey, 121, 152, 393, 407.
 — Pied, 136, 152, 208.
 — Yellow, 121, 496.
 Warbler, Black Cap, 143, 153, 353.
 — Grasshopper, 178, 498.
 — Sedge, 121.
 — Willow, 153, 154.
 — Wood, 143, 153.
 Water-Crow, *see* Dipper.
 Water-Hen, 537.
 Waxwing, Bohemian, 121, 498.
 Wheat-ear, 49, 131, 136, 152-4, 208, 397, 400.
 Whimbrel, 51.
 Whin-chat, 121, 136, 397.
 White-throat, 153, 397.
 Woodcock, 52, 138, 153, 197, 400, 498, 508, 536.
 Woodpecker, Great-spotted, 193, 196, 505.
 Wood-Pigeon, 50, 112, 179, 192, 397, 457, 506, 512, 524, 535.
 Wren, Common, 100, 104.
 — Golden-crested, 49, 121.
 Yellow-hammer, 535.

I N D E X.

- Aborigines of Central India, page, 66, 67.
 Accounts, 202, 379, 552.
 Acklington and Felton Meeting, 212.
 Acklington, Lord of, 215; Parish and Church, 216-7.
 Adam le Colererman, 240.
 Adamson, Mr James, 307.
 Adders, 99.
 Adder-stone, 418.
 Adipocere, found, 402.
 Aiken Knock, 434-5.
 Aird, Thomas, 227.
 Aldcambus, Edward de, 482-3.
 Alexander. Sir William, first Earl of Stirling, 346.
 Allan, Mr James, 309.
 Allanbank House, 392-3.
 Allerdean, N. Durham, 480-1.
 Alnmouth, John de, 240.
 Alnmouth, History of, 238-258; Church of, 239: Port, 239, 240; Market and Fair, 240; Dues from, 240; Burgh Court, 240; Trade and Shipping, 241, 246-8; Proprietors and Burgesses, 240-4; Beacon, 243; Common, 244-6; Trade, 246-7; Harbour, 247; Fishing, 248; Watering Place, 249; Voters, 249; Population, 249; Rental, 249; Methodist Chapel, 249, 255; School, 249; Privateering off, 250, 255-6; Paul Jones off, 250; Chapel, 250-3; Saxon Cross at, 250, 257; Tithes, 252; Bell, 253; Church, 254; Tombstones, 253; Annals of, 255; Fossil Bones at, 255; Horse-races at, 256; Storms and Shipwrecks, 256; Smuggling, 256-7; Border Watch of, 258.
 Alnwick Meeting, 4.
 Alnwick Abbey, 251-2, 481; Baromy, 57, 239, etc.
- Alpine Plants, interest of, 316-7.
 Altar of the Virgin Mary at Coldingham, 541.
 Altar Stone found at Coldingham with notice of the Altars there, 539, etc.
 Alwenton, William de, 483-4.
 American Brook Trout in the Pont, 218.
 Amulets, 417-8.
 Anacharis alsinastrum, 22.
 Ancroft, N. Durham, 481.
 Anderson, John, Localities of Berwickshire Plants and Miscellanea, 493-4.
 Anniversary Address, 2, 203, 383.
 Antiquities found, 393, 395, 396, 398, 402-3, 417, 418, 431.
 Apples, varieties of, 312.
 Arasweryk, 549.
 Araucaria imbricata at Dunse Castle, 30, 168; at Linden, 274.
 Archerfield House, 210.
 Arkle, Thomas, The Simonside Find, 176; on the Family of Riddell, 324.
 Armorer of Belford and Alnmouth, 241-2, 248.
 Arnot of Cockburnspath, 405.
 Aromia moschata, 318.
 Arrival and Departure of Birds, 393, 429.
 Arrow heads of Flint, 166-7.
 Arveto or Hotote, Caterpillar of, 23.
 Arvicola, on species of, 447, 467.
 Arvicola arvalis, injury by, 464-5.
 Ash rootlets, choking-water pipes, 23.
 Ashiesteel, Bridge, 422; House and Neighbourhood, 423-7.
 Ashiesteel, Sir Walter Scott's connection with, on, 436.
 Astynomus Œdilis, 196.
 Athalia glabricollis, 435.
 Atherstone Moor, Battle of, 98.

- Auchan Pear, Origin of, 313.
 AuldCambus, Vicarage, 305.
 Aunt Margaret's Mirror, heroine of, 347-8.
 Axe-hammer and Adzes or Hoes, 160.
 Ayton, Lepidoptera found at, 127, 321.
 Ayton, Sir George and Patrick Homes of, 206-7.
 Badger, peculiar habit of, 523; traces of, 457-8.
 Baird, Dr William, Tomb of at Swinton, 219.
 Baker, James, Vicar of Stamfordham, 265.
 Balfour, Professor J. H., M.D., etc., Anniversary Address, 383.
 Ballan Wrasse, 119.
 Balliol, Henry de, burial place of, 294.
 Bamburgh, Vill, 241; Coals at, 286.
 Banners of Northern Rebels, temp. Hen. viii and Elizabeth, 542.
 Bank of Scotland, 345.
 Barley, Double-eared, 205.
 Barnhill, 214-5.
 Baron of Bradwardine, 284.
 Bartill John, 300.
 Beacon, at Alnmouth, 243.
 Beauge, Battle of, 333.
 Beaver, Skull of found near Kimmerghame, 205; and at Linton Loch, 206.
 Beaumont Hill, Roman Coins at, 220.
 Beechtree, large, 228.
 Beck or Bek, Bishop, his Disposition of the Barony of Alnwick, 57; his Siege of Dirleton Castle, 209.
 Belford, near Yetholm, Rude Flint-Implements at, 211.
 Bell, Miss Elizabeth, of Springhill, 31.
 Bell, C. S., Notes on Brainshaugh Chapel and Guyzance, 214.
 Belses, Coin found at, 205.
 Beniston Moor, E. Lothian, 98.
 Bennett, Thomas, Notice of, 257.
 Benton Ragwell, 369.
 Berwick, Documents connected with, and Events at in the Civil War, 94-97; Holdings in the Town and Shire of, 297; Papedies of 486; Deeds signed at 484, 488.
 Berwick, Duke of and the Town of Berwick, 280-2.
 Berwick, Meetings at, 203, 389.
 Berwickshire, Justices of the Peace in, in 1732, 514-6.
 Bibliographical Notices, 4, 31, 47, 68, 70, 71, 73-75, 232, 233, 238, 351, 416, 423, 430, 432, 435.
 Biggar, Masses for the five wounds of Christ in the Collegiate Church of, 542.
 Bigge, Rev. J. F., Damage done to Trees by the Water-Vole, 189; on Stamfordham Church, 263; Occurrence of the Nightingale in Northumberland, 446.
 Birch, on native, in Selkirkshire, 148.
 Birds, see Index of Birds.
 Birds, Arrival, Departure, etc., of 131, 152.
 Birds, Difference in Sizes of same species, 523.
 Birds, Effects on of Winter 1878-9, 535, etc.
 Bisset, Sir John of Lovat, 296.
 Blackadder House and grounds, 391-2.
 Black Auchan Pear tree, large, 210.
 Blackden, 129.
 Black-tails and Bull-trouts, 169, 174, 278.
 Black Water-vole, 180.
 Blakelaw and Blakeman's Law, Northumberland, 130.
 Blindlee and the Birks, 419.
 Bolam, George, Notes on Birds, 111; Ornithological Notes, 495; on the Vaagmaer or Deal Fish, 509.
 Bolam, R. G., Notice of arrival of Birds, etc., at Weetwood Hall, 131; on the Common Buzzard, 190; on the Growth of Ornamental Trees at Linden, 274.
 Boner, Mr Thomas, 305.
 Bones, Large, at Alnmouth, 255.
 Book of Deir, 234.
 Border Watches, 258.
 Boston, Mr Thomas, 307-9.
 Botanical Notices, 9, 16, 17, 21, 24, 27, 77, etc., 208, 211, 214, 227, 228, 229, 391, 392, 393, 395, 398, 400, 401, 402, 405, 406, 407, 409, 410, 411, 414, 415, 429, 432, 433, 452-4, 473-9, 493, 510, 517, 533-4.
 Botanists Modern, their specialities, 387.
 Boteric, Loretta de, 242.

- Bothwell's Marriage with Lady Jane Gordon, 236.
 Boulder, 421.
 Bouston, Wm. and his Spouse, Feucharter of, 207.
 Bowden Church, 227.
 Bowhill, 14; Sir John Murray of, 13; "Hained Ground" of, 473.
 Braidhauche, lands of, 275.
 Brainshaugh Chapel, 214-7.
 Brandling, Charles, of Alnwick Abbey, 98.
 Branton, Estate of, 244.
 Breckburne or Brinkburn Priory, 216, 240.
 Bride of Lammermoor, Heroine of, 347.
 British Camps, Dwellings, &c., 396, 398, 399, 400, 429.
 British Cists found at Galashiels, 441, etc.
 Brockhole and Butterdean Lands, 489.
 Bronze Articles found, 176, 177, 403, 428-9.
 Brotherston, Andrew, Selkirkshire Plants, 87; on some remarkable Border Fishes; on the Greenland Shark and its parasite, 159; on a Collection of Willows, 269; Plants at Yeavering, 402; Occurrence of White's Thrush in Berwickshire, 518; Zoological Notes, 520; Notes on the Effects of the Winter of 1878-9, p. 535.
 Brown, Dr. Colville, on the Change of colour in the feathers of the head of the Black-headed Gull, 531.
 Browne or Brown, of Ewart, Alnmouth, Doxford, &c., 244, 245.
 Broxmouth Park, 8.
 Bruce, Rev. J. C., LL.D., on Coventina's Fountain at Procolitia, 356.
 Brydone, Patrick, F.R.S., 218, 220.
 Buchan-Hepburn, Archibald, Coleoptera in East-Lothian, 132, 314.
 Buckholm, its Cheese and Ancient Dairy, 419.
 Buglass, Simpson, Lepidoptera at Ayton, 127, 221.
 Burgh-Male, 240.
 Buxbaumia aphylla, 88.
 Caddon Cliffs, 429.
 Caddon Foot, its Church and School, 427.
 Caddon Ford, 428, 439.
 Caddon Lee, 424, 427, 472.
 Caddon Linns, Bronze and Iron Implements and Ornaments found near, 428, 429.
 Calais Groat of Henry IV., 205.
 Calyptostoma Hardii, sp. n., 107.
 Cambridge, Rev. O. P., Description of a new Genus and Species of Arachnida, 107.
 Campbell, Thomas, Letter of, 221.
 Canongate, Edinburgh, Seal of the Burgh of, 393.
 Cape Colony, Notices of, 34-41.
 Carson, Anna, 516.
 Catrail, 424, 433, 439.
 Cavern near Siccar Point, broken bones and shells in, 221.
 Cavers-Carre, 227.
 Celts, Bronze, 164, 205.
 Celts, Stone, 11, 28, 163, 205, 418, 440, 441, 543, 544, 547.
 Chambers (Dr William) his Notice of the Club, 436.
 Charagria virescens, 23.
 Chapel at Coldingham, 540.
 Charles V., the Emperor, Coin of, 548.
 Charters, Titles of some Berwickshire, 206-7.
 Chesters House, Antiquities at, 224-5.
 Cheviot Sheep, 451.
 Chirside, Mr Alex. Smyth, minister of, 305; Club's Meeting at, 390; Paper Mill, 390-1.
 Chollerford Meeting, 221; Roman Bridge near, 223.
 Chrystie, Mr James, 309.
 Church-hill, Alnmouth, 247, 254.
 Cilurnum, Station of, 224.
 Clavering, Sir John, of Callaly, 97.
 ——— Sir Robert, 97.
 Clay weights used in weaving, 440.
 Cleresei, Dunantie de, 483.
 Clerkson of Alnmouth, 243.
 Clovenfords and its Vinery, 421; its Inn and Literary Visitors, 421-2; its School, 427, 472.
 Coals, old grant for at Bamburgh, 286.
 Cockburn, Mrs, the poetess, 430-1.
 Cockburns of Langton and Simprin, 300-3.
 Cockburn, Sir Archibald, his improvements, embarrassments and law-suits, 302-3.

- Cockburnspath; Village; Cross; Barony and Owners; Parish, Chapelaunie and Hospital; 404-5.
- Cockles, Oysters, and Mussels, 248.
- Coins and Medals, 205, 218, 220, 221, 224, 267, 290, 293; found at Lamberton Shiels, 404; of Emperor Charles V., found at Kelso, 548.
- Colbrandspeth or Cockburnspath, Sheep of the Countess of March on the grounds of, 286.
- Coldingham, Altar Stone found at, 539, etc.; Church garrisoned by Reivers, 288; flocks of the Monastery, 288; perambulation, etc., of lands, 488-9; lands of the Altarage of St. Mary, 541.
- Coldstream Meeting, 217.
- Coldstream, Priory of St. Mary at, 275; Orchard of, 312-3; Lease of Little Swinton to, 334; Gifts to, 484; Seal of, 516.
- Coleoptera of East Lothian, 132, 314.
- Colias Edusa, Occurrence of, 321, 323, 371.
- College Stead, Dirleton, 208.
- Collingwood, Ed. J., Rain Fall at Lilburn Tower, 202.
- F. J. W., Rain Fall at Glanton Pyke, 202, 380, 551.
- Comyn, William, Keeper of Selkirk Forest, 285.
- Congalton family, burial place of, 210.
- Connaught, Duke of, 29.
- Cook-Wrasse, 522.
- Corkwing, 118.
- Corn trade at Alnmouth, 246-7.
- Coventina's Fountain at Procolitia, 356, etc.
- Coverings of Altars, 540.
- Cox, Rev. W., sen., et jun., vicars of Embleton, 416.
- Cragside, 26, 27.
- Craighill or Fell at Yair, 423.
- Craig, Thomas, Notices of Ancient Burial Urns from Roxburghshire, 128, *see* 546; On Stones exhumed from the site of the Ancient Royal Burgh of Roxburgh, 289.
- Cranogs, Scottish, 235.
- Cranshaws, Lands of, and Church, 332, 334, 336, 338, 345.
- Craster village, 415.
- Crasters, monuments of, 413.
- Crimean War, 42-3.
- Cromwell's Mount and Well, 8.
- Cross, Pectoral of Gold, and Ring, from Co. Durham, 28.
- Cross, Saxon, at Alnmouth, 250-1.
- Crosses within circles, age of design, 541.
- Cuckoos, early and late, 193; Change of Note, 103.
- Cumberland, William, Duke of, 29.
- Cupples, Mr. of Swinton, 310.
- "Cure for a Scold," 416.
- Cyclopia in Lambs, 524.
- Dagger from Eildon Hills, 418.
- Dalden, William de, 481.
- Dand, Mr Middleton, his discovery of Incised Rocks on the Coquet, 212-3.
- Darien Company, 345.
- Darley, Governor of Berwick, 97.
- D'Andre, family of, 481.
- David, Bishop of St. Andrews, 295.
- Davidson, George, Reader at Simprin, 306.
- Davie the Devill, 299.
- Deas, John, Rainfall at Lilburn Tower, 380, 551.
- Death's Head Moth, 418, 525, 532.
- Debdon Burn, 27.
- Deer-forests of Scotland, 284-6.
- Derwentwater, Lord, 263.
- Dials, curious, 11, 408.
- Dingaan, Zulu chief, 35, 37.
- Dirleton Castle, its Ruins, Sieges, History and Garden, 209.
- Dixons of Inghoe, 267.
- Dockwray, Dr Thomas, Vicar of Stamfordham, 263, 265-8.
- Doddington Church, 231.
- Donations of Books and Papers to the Club, 198, 376, 549.
- Dorsal, 540.
- Douglas, Charles, M.D., his Anniversary Address, 203.
- Douglas, Earls of; Archibald 4th Earl, 332, 334; William, 1st Earl, 332; James 2nd Earl, 332.
- Douglas, Sir William of Kirkness, 9, 11.
- Draco of the Ancients, 116.
- Drumlanrig wood and the Voles, 462.
- Dunbar, Earls of, 288, 482, 483, 484, 487.
- Dunbar Meeting, 7; Castle and Coast of, 7, 8; Battle of, 8, 9; Church, 9; Ornithology of the Coast, 48-56;

- Dunbar, Testacea of, 74-5; Town, &c., 485, 487, 490.
- Dunglass, 9.
- Dunglass and its Owners, 409, 410; Dean Mill, 406; Plants found near, 410, 411; Papedies of, 482; Collegiate Church of, 485; Coat of Arms in, 485; Tomb in, 489.
- Dunse, Charter of James IV., of the Town of, 91; Meeting at, 204.
- Dunstanborough Castle, 28, 241, 412, 414.
- Dunstan Steads and John Duns Scotus, 415.
- Eadulf, K., of Northumberland, 251.
- Earliest Morning Songsters, 101.
- Earl of Marches' Muire, 482.
- East Lothian, Birds of, 71.
- East Nisbet, 393, 482, 488.
- Edie, Capt., 38.
- Edinburgh, Tolbooth Jail broken into, 302.
- Edrom, 482, 484.
- Eidulf of Swinton, 328.
- Edward I., his gifts of Deer and Oaks from Scottish Forests, 284-6.
- Eels, 185.
- Effects of Winter, 1878-9, 498, 502, 503, etc., 511, etc., 535.
- Elbauk, Lands of, 336.
- Elbottle, 210.
- Elibank, Patrick 5th Lord, 303-4.
- Elishaw, Northd., Proverb about, 130.
- Elliesheugh, Rox., Urn at and Notice of, 129, 546; the Lang Gaunts of, 129.
- Elliot, Sir Walter, F.R.S., &c.; On the Plague of Field Mice in the Border Farms in 1876-7: and on the Genus *Arvicola*, 447, etc.
- Elphingston, Dame Helen, Lady Laughton, 300-1.
- Embleton Meeting, 412; Church, 413; Vicars, 416.
- Embleton, Robert Castles, Notice of, 229; Memoir of, 373.
- Emeldon, Richard de, 240; Christiana his wife and Jane his daughter, 240.
- Emildon or Embleton, vill of, 241.
- Emotehill, Land of, 481.
- Engagement, The, 301; Quarterings and Plundering by the Engagers at Simprin, 301.
- Entomological Notices, 403, 406, 435. See Lists of Coleoptera and Lepidoptera.
- Epipactis latifolia*, 228.
- Ercheldun, 482.
- Erigone conigera*, 435.
- Esheughe, 129.
- Esparto Grass, 390.
- Ettrick Forest, its Physical Features, &c., 77-9; Deer and Oaks in, 285, 479; Sheep in, 288; Extent of Wood in, 439, 473, 478-9.
- Evans, Arthur H., Birds and Lepidoptera near Scremerston, 120; Stonechats nesting in Rabbit burrows, 191.
- Eyemouth, Lepidoptera found at, 124, 323.
- Fairnalee House, its Owners and Associations, 430-1.
- Falside of that Ilk; and Castle of, 335.
- Farquharson, Rev. James, List of the Flowering Plants and Ferns observed in Selkirkshire, 77 etc.; On the Leafing, etc., of certain Trees, 88; On Howebottom, the "Hained Ground," at Bowhill, Selkirkshire, 473.
- Fedia dentata*, 229.
- Felkington, 481-2.
- Felton and Felton Park, 217.
- Felton, Sir John de, 267.
- Fenwick Tower, 266.
- Fibula of Jet, 544.
- Field Mice or Voles (*Arvicola agrestis*), Plague of on the Borders, 11, 16, 447-474; injury to Plantations by, 462-4, 538.
- Fishes, Border, Observations on some, 115, etc.
- Fishes, Notice of, 509, 520, 522, 525, 532.
- Fishwick Churchyard, 22.
- Fitz-John, Eustace de, 239.
- Five wounds of Christ, 540-2.
- Fleming, Malcolm, Lord, 542.
- Flemington, 288.
- Flint Implements, 211, 403, 411, 440, 544, 546.
- Flocks and Herds, Border, number of, 287-8.
- Flodden Antiquities, 103-4.
- Flodden Flag and Sword of Selkirk, 15;

- Flodden, Banner of the Homes of Wedderburn, 206.
- "Flowers of the Forest," 430.
- Food of Birds; Anatidæ, 537; Black Cock, 187, 536; Brent Goose, 537; Cormorant, 184; Crested Grebe, 526; Eared Grebe, 522; Goosander, 537; Heron, 537; Hooded Crow, 182, 526; Little Grebe, 530, 538; Little Gull, 522; Mallard, 537; Stockdove, 499.
- Foulshiels, 14.
- Forests, Crown, infested by Voles, 462; of India, 63, 65.
- Forrest of Archerfield, 210.
- Forsyth, Capt. James, M.A., Bengal Staff Corps, Memoir of, 59; List of his Writings, 70.
- Forsyth, Rev. James, D.D., Memoir of Capt. James Forsyth, M.A., 59.
- Forsyth's Shell, 62.
- Fossils, 393, 404.
- Foxton Hall, 257.
- Frizel, (Frazer) Simon, keeper of Selkirk Forest, 285.
- Frontal of Altar, 540.
- Galashiels Meeting, 417; Town and Neighbourhood, 418-9; Cross, 418; Graves, Ancient, near, 434, 441.
- Galicia, Hungary and Transylvania Plague of Voles in, 464-5.
- Gallon of Alnmouth, 244.
- Garfish, 525.
- General Statement, 202, 379, 552.
- Geological Notices, 8, 21, 208, 212, 229, 393, 394, 396, 406, 408, 414, 415, 418, 419, 420.
- Gibb, T. H., Notes on Birds in North Northumberland, 133; Notes on Birds in 1878-9, 511.
- Gibson, Mr George, 276.
- Mr James, 306.
- Gilia daur. of Matilda de Muschamp, 483.
- Gillespie, Patrick, in Simprin, his losses and fines, 301-2.
- Gilpin, Bernard, 25.
- Gladsmuir, E. Lothian, 71, 98.
- Glanton, 242.
- Gleedcleugh, Etymology of, 400.
- Glenkinnon's rill, 423, 439.
- Gloster-hill, 215.
- Golden Eagle in the Cheviots, 185; near Biggar, 531.
- Goldsinny of Jago, 117.
- Goodyera repens, Cultivation of, 510.
- Goosander and Eel, 181.
- Goose, Monstrosity in domestic, 180.
- Goswick, Owner of, 342.
- Gowrie, William Earl of, 209.
- Graham de Lovet (Patrick) of Sempyrng, 296.
- James, Marquis of Montrose, 98.
- Grasses and Plants eaten by Voles, their local Names, 452-4, 470.
- Graves, ancient, Urns, &c., 395, 402, 406, 409, 434, 441.
- Gray, Robert, F.R.S.E., The Ornithology of the Dunbar Coast, 88; Notice of William P. Turnbull, LL.D., 71; Notice of Capt. James Laskey, 73; Note on the Occurrence of the Velvet Scoter in Scotland during Summer 1876, 75, 501; Ornithological Notes, 155; 195-6; 353; 498; 531-2.
- Grayling, Deformed, 525.
- Green Cod, 120.
- Greenland Shark and its Parasite, 149.
- Greenlaw, William de, 483-4.
- Green Plover, how it starts its prey, 195.
- Greenrig and Bittrickside, Lands of, 337.
- Grey, William, Lord Grey of Warke, 98.
- Thomas, 98.
- Greys of Morwick, 212.
- Gullane Meeting, 207; Links, 210; Church, 210.
- Gunnerton Crag, Celt from, 11.
- Gurnard, Smooth, 115.
- Guyzance, 214, 216.
- Haddington, Thomas 1st Earl of, 275.
- Halieland (Holy Island) 241.
- Haliwerestelle Fishery-on-Tweed, 241.
- Hall, family of, Dunglass, 405, 410.
- Halsington, Lands of, 446, 483, 484, 488.
- Halyards, Lands of, 276, 277, 340.
- Halyburtons of Dirleton, 209.
- Hamilton, John of Pencaitland, 211.
- Sir John of Trabroun, 275.
- Hammer-Stones, 163.
- Hanging Tree, 15.

- Hancock of Wallieford, E. Lothian, 344.
- Harcarse, Lands of, 335.
- Harehope Camp in Cheviot, 398-9.
- Hardy, James; Obituary Notice of the Rev. Stephen Hislop, 68; Local Documents, Notes on, 91, 280; on the Native Birch in Selkirkshire, 148; Arrival, Departure &c. of Birds, in 1876, 152; on the Ancient Stone and Flint Implements, &c., of Berwickshire and the Borders, 160, 543; Zoological Miscellanea and Correspondence, 189; Obituary Notice of Rev. Wm. Procter, M.A., 230; on Alnmouth, 255, etc.; on the Estate of Lees, Coldstream, 275; Deer Forests of Scotland, 284; Coals in Bamburghshire, 286; Number of Border Flocks in Early Times, 287; an Account of Simprin, Berwickshire, 294; Notice of the Orchard of Coldstream Priory, and of the Origin of the Auchan Pear, 312; on the occurrence of *Colias Edusa* in 1877, 371; Report of Meetings of the Club for 1878, 389; Note on Rottenrow, 446; on the Border Family of Papedy, 480; Miscellanea and Extracts from Correspondence, 527; on an Altar Stone found at Coldingham, 532; on a Silver Coin of the Emperor Charles V., found at Kelso, 548; Note on the Papedy Family, 550.
- Hedgehogs, 99.
- Hepburn, Archibald, 55.
- Hepburns of Blackcastle, 407-8.
- Hepple, Estate, 327.
- Heriots, Tomb of, 211.
- Heryng, Mary, number of her Sheep, 287.
- Heugh or Hoghe village, N., 263; Chapel, 269.
- Hieracium collinum, 16, 85.
- Hilson, John, On Rottenrow and Rattenraw, 443.
- Hilton, Baron, 215.
- Hilton, Ber., Lands of, 338.
- Hirsell, Old, Land in, 484.
- Hirsell, Territory of, 275; Kerr of, 275.
- Hislop, Rev. Stephen of Nagpore, 67, 68; Rev. Alexander and Robert, 68.
- Hoe Stone, 161-2.
- Holly, Dr N. Paterson's praise of the, 423.
- Holne Abbey, 255.
- Holywell, 21.
- Homes of Dunglas and Wedderburn, 9, 485; Arms of the, 485; of Manderston, 489.
- Home, Sir Alexander of Dunglas, 288.
- Mr Alex., minister at Ayton, and his spouse Jean Home, 541.
- Mr Alex. de Houndwood, and his son Alex., 541.
- Andrew of Simprin, 300.
- Sir David of Wedderburn, 96.
- Sir David I., of Wedderburn, 288.
- Sir David and his son George slain at Flodden, 206.
- George of Ayton and Whitefield, 92, 94.
- George of Manderston (E. of Dunbar), his tomb, 9.
- George of Wedderburn, 206.
- Jasper of Simprin, 300.
- Mr John, Author of Douglas, 303, 310.
- Sir Patrick of Ayton and his spouse, 207.
- Homildon Field, 331, 332, 485.
- Horncliffe Dean, 21; House, 23.
- Horneden, 300.
- Horse-races, 256.
- Horses' Shoes, great numbers found, 402.
- Hotspur (Henry Percy), 331.
- Howebottom, the "Hained Ground," at Bowhill, on, 473.
- Hownam parish, Urns in, 131.
- Howpasley and other Farms, infested by Field Mice, 455, 469.
- Hulawishou or Hulcheshou, 129.
- Humbleton, Burnhouse, Fields and Baulks, 395; Cemetery and Village, 395-6; Peel, 396; Freeholders and Freeholds, 396; Hill, 397; Fight, 402-3.
- Hume, Alex., of Manderston and his son, 298.
- Bartholomew of Simprin and Horndean, 299, 300.
- David called Cranshaws, 298, 299.
- David of Godscroft, 299.

- Hume, Sir George of Wedderburn, 299.
 ——— Sir John of Duns, 94.
 Hundwode, Thomas Purvas of, 488.
- Jago, Rev. George, 118.
 Jedworth Forest, 286.
 Jet Ornament, 544.
 Illustrations of the Zoology of South Africa, 41.
 Implements of Northumberland out of Use, 28.
 Incised rocks near Morwick Mill on the Coquet, 112, 213; Circles from a Church at Fiesole; Circles and Cups on rocks in Ireland, 417.
 Inghoe, Chapel at, 269.
 Joanna, Queen of Spain, Coin of, 548.
 Johnston, Dr George, birthplace of, 304.
 Jolly, Mr John, 310.
- Keith, Sir Alex. of Ravelstone, 347.
 Kellilaw, Coldingham, 488.
 Kelly, Andrew, on some of the Birds of Lauderdale, 142.
 Kelp, 246-7.
 Kelso Abbey, burning of, 479; attack of, by Hertford, 548.
 Kerr, Sir John of Hirsell, 275.
 Kerse, James; on the Ornithology of Bowhill, 197.
 Kimmerghame, 204, 206.
 Kirke, Rev. Dr Robert, on a Hen which moults alternately Black and White, 193.
 Knife of Flint, 546.
 Knight, Valentine, on the occurrence of rare Birds in the district, 109; Ornithological Notes, 258.
- Laidlaws, the doom of the, 423.
 Lambermore, 488.
 Landreth, Mr James, 310.
 Langton, Cockburns of, 300-303.
 ——— Lady, 299, 300, 301.
 Larks feeding their young in confinement, 181.
 Laskey, Capt. James, Notice of, 73.
 Late nesting of Quail, 181.
 Launder, George, author of "Tears on the death of Evander," 335.
 Launder of Bass, 335, 337.
 Launderdale, Birds of, 142.
- Laundells, John and William of Hounam, 483; William, Bishop of St. Andrews, 486.
 Laynall, South Town of, 484.
 Leafing and Flowering of certain Trees, 88.
 Lecanium or Scale of the Black Currant, 403.
 Lee, Dr John, (Principal) Notice of, 427-8.
 Lees, on the Estate of, 275.
 Leit, Water of, 275.
 Lennel, 218: Hand Bell of, 221.
 Lepidoptera, 20, 23, 122, 124, 127, 318, 321, 323, 371, 406.
 Lerneopoda elongata, Account of, 151.
 Lesbury Parish, Account of, 238.
 Lesley, Barbara, Lady, 410.
 Leslie or Lesley, David, General, 12, 23, 98.
 Letham (Leitholm), the Lord de, 295.
 Leuchie, 276-7.
 Levingtouns of Saltcoats, 211.
 Leya, Matilda de, 481.
 Leyden, Dr. John, Anecdote of, 427, 472.
 Lilliesleaf, 228, 324, 325-6.
 Lindsay, David Lord, Pope Clement's Letter of Cursing against, 207.
 Linthill House, 228.
 Linnæa borealis, Cultivation of, 510.
 Linton, Barony of, 215,
 Linton Bridge, E.L., 98.
 Little Reston, 483.
 Liulf of Swinton, 328.
 Lob-worm in Water, 105.
 Localities for rare Border Plants, 493, 533.
 Local Documents, 91, 280.
 Loney, Peter, on the Remarkable Trees at Marchmont, 517.
 Longhoughton Common, 244.
 Luckier, Roman Lamp at, 217.
 Lumley, family of, 481.
- Macmath, Mr John, 304.
 Maitland, William of Lethington, 298.
 ——— Sir John, Lord Thirlestane, 298.
 Makerston Church, 264, note.
 Manderston, Charter of, 487; family of, 487, 489, 490.
 Mar, Margaret, Countess of, 332.
 March, Christian, Countess of, number of her Sheep, 286.

- Marchement Marchmond, etc., (Roxburgh), 289.
 Marchmont, Remarkable Trees at, 517.
 Marjoribanks of Halyards, 276, 277.
 — of Lees, 276, 277.
 — of Lenchie, 276, 277.
 — Charles, 304.
 — Lord, 19, 304.
 Marston Moor, Battle of, 98.
 Marrow of Modern Divinity, 308-9.
 Marten, Common, Occurrence of in Berwickshire, 527.
 Matabele Territory, 37.
 Matfen Church, 269.
 Maxwell of Innerwick, 209.
 Maxton, Lands of, 297.
 Meigle Moss and Hill, and Meigle Pots, 420.
 Melrose, Benefactors to, 482, 483, 484, 479, 487; Sheep of, 288.
 Melville, Mr Robert, 305.
 Members, List of, 32, 381, 553.
 Mensa or Upper Slab of an Altar, 539, 540.
 Merse Proprietors, Old, 482-3-4-7-8, 490.
 Merton, Vill and Lands of, 296, 297.
 Meteorological Condition of the Winters from 1870 to 1876, in S.E. of Scotland, 459-461.
 Mice Plagues, 466.
 Michie, Alex., Memoir of Sir Andrew Smith, M.D., etc., 33.
 Middlemas, Robert, Memoir of Robt. Castles Embleton, 373.
 Middleton, Sir John de, and his wife Christiana, 240.
 Midelham of Alnmouth, 242.
 Miscellanea, 189, 494, 527.
 Moffat, Rev. Robert, 39-41.
 Moir, Mr John, 307.
 Monivaird, Battle field of, 418.
 Moles and Field Mice, 457, 458-9.
 Moles (?) Plague of in Moldavia, 465.
 Monk and Lambert's Siege of Dirlerton Castle, 209.
 Monks' Well, the, 21.
 Mons Meg, her ammunition, 220.
 Montrose, Marquis of, 13, 98.
 Morebattle, Ordination at, 309, 310.
 Morham, E. Lothian, 59.
 Morpeth Castle, 98.
 Morwick Hall, 212.
 Moselekatse, 37, 39.
 Moshesh, 41.
 Motella triciirrata, notice of, 532.
 Moulting *v.* Change of Colour of feathers in Head of Black-headed Gull, 187, 531.
 Mountain Ash, 148.
 Mrs Macfarlane, Story of, 347-9.
 Muirhead, George, Notes on Birds in the neighbourhood of Paxton, 178, 503.
 Murray of Falahill and Philiphaugh, 13, 14.
 Murray, Patrick, of Simprin and Meigle, 304.
 Muschauns or Muschamp, Sir George of Barmore, 96.
 — ————— Matilda de 484.
 — ————— Robert de, Lord of Wooler, 483.
 Naked Oak, 431.
 Natal, Colony of, 36, 37.
 Neidpath Hill, 429.
 Nelson, Dr and Mr John, 56.
 Nest, the, fishing cottage, 427, 472.
 Nevill, John de, liberty of digging for coals at Bamburgh, 286.
 Newcastle, 98.
 Newark Tower, 14.
 Newminster Abbey, 339.
 Ngami, Lake, 40.
 Nicolson of Cockburnspath, 405.
 — Lasswade, 337, 405.
 Nightingale in Northumberland, 411, 446.
 Nisbet, Alex. Author of the Heraldry, 337.
 Nisbet of Nisbet, 337.
 Nisbet, Sir John of Archerfield, 210.
 Norham meeting, 17; Church, 18; Sculptured Stones at, 19.
 Northamptonshire Papadies, 480-1.
 Normanvilles of Stamfordham and Maxton, 264-5.
 Northumbrian County Manners in reign of Queen Anne, 416.
 Oak Trees, 285-6, 401, 479.
 Oats and Grain in Selkirkshire, 80.
 O'Beirne, Rev. T. L., 265.
 Obituary Notices, 31, 68, 229, 230, 232, 257, 373, 435.
 Oldhamstocks Meeting; Village; Fair; Church and Churchyard, 407-408.

- Olifard, Walter de, Justiciary, 483.
 Orange Fins, 170, 171, 277, etc.
 Orchard of Coldstream Priory, 312.
 Ornithological Notices and Memoirs,
 48, 75, 100, etc., 109, 120, 131, 133,
 142, 152, 155, 178, 180, 189, etc.,
 197, 258, 353; 495-8; 498-502;
 503-509; 511-514; 520-526; 527-
 532; 535-538.
 Orthotænia antiquana, Habits of,
 126.
 Otterburn, Battle of, 34.
 Outlaw Murray, 13.
 Oxnam, Token of, 221.

 Pa or Pai, Stephen de, Bishop-elect
 of St. Andrews, 486.
 Pae, Aldred the son of, 486.
 Papa, title of, 480.
 Papedy, the Family of, 480, etc.;
 Papedi of Norham, 480; the
 Priest, 481; Wimarc or Wimart,
 481; Eustachius, 482; Stephen,
 482-3-4-7, 550; John, 483, 487;
 Thomas, 484, 487; David, 484,
 550; Elena, 484; Nicholas, 485;
 Thomas, senior and junior, 486;
 Henry, 487.
 Parasitic Worms, 524.
 Park, Mungo, 14.
 Parker, Vicar of Embleton, 416.
 Paterson, Dr Nathaniel, 423.
 Paul Jones off Alnmouth, 250.
 Paul, Rev. Robert, List of Berwick-
 shire Justices in 1732, 514; Seal
 of the Priory of Coldstream, 516.
 Paulin, George, Notes and Statistics
 as to the Tweed Salmon Fishings,
 112.
 Paxbred, 540.
 Pear-leaf Saw-fly Caterpillar, 28.
 Pear trees, Varieties of, 312, 313.
 Peel Farm, Wood and Burn, 423-4.
 Penmanscore, 439.
 Percy, Henry de, 240.
 Percy, Henry Lord, 57.
 Petcockes, Philip de, 487.
 Pheasant and its Natural Foes, 194.
 Philiphagh, Battle Monument, 12;
 House, 13; Battle, 98, 424.
 Picts Work Ditch and a Pick-work,
 433-4.
 Piercers, Flint, 167.
 Pilgrimage of Grace, 541.
 Pitillishouche, Land of, 484.
 Places of Meeting, 201, 379, 551.
 Plane, Maple, and Lime, Leafing of,
 88-90.
 Plumpton, Sir William de, 240.
 Polworth Church, 336.
 Pomarium of Coldstream Priory,
 312-3.
 Priests, Marriage of, 480; Number
 Officiating at Coldingham, 540.
 Pringle, Alexander, Lancelot and
 James of Lees, 275; James (2) of
 Lees, 276.
 Pringle of Buckholm, Blindlee and
 Torwoodlee, 419, 421.
 — Robert of Clifton, 275.
 Privateering off Alnmouth, 250, 255-6.
 Procter, Rev. William, Vindication of
 Bishop Bek's Disposition of the
 Barony of Alnwick, 57; Obituary
 Noticé of, 230.
 Productus, Habit of a species of, 8.
 Pterichthys major, 393.
 Purvas Thomas, of Houndwood and
 Swinewood, 488.
 Pyrola secunda, 401.

 Rabbits, Damage done by in severe
 winters, 538.
 Rainfall at Glanton Pyke and Lilburn
 Tower, 202, 380, 551; at North
 Sunderland, 380.
 Ramrigg, 299.
 Ramsay of Edington, 9.
 Rannoch Plantations and the Voles,
 463-4.
 Ravensden in Berwick, 297.
 Rebellion of 1715, 282-3.
 — the North, 1569, 542.
 Red-Deer, 205, 285-6.
 Red-Rigs, 403.
 Reeve, on the, 195.
 Renton, Robert, Lepidoptera taken
 at Threeburnford, 318.
 Report of the Experimental Commit-
 tee of the Tweed Commission,
 1876, 1877, 1878, 169, 277, 490.
 Report of the Committee of the
 Teviotdale Farmers' Club on the
 Plague of Field Mice, 469.
 Reptilia, Sir A. Smith's Collection of,
 42.
 Return of Marked Fishes in the
 Tweed, recaptured, 172, 279, 492.
 Riddell or Western Lilliesleaf, 228,
 325.

- Riddell of Riddel, the Family of, 324, etc.; Sir John Buchanan, 326-7; Sir Walter, 327.
- Riding stone at Ashiesteel, 426.
- Rink Camp and the word Rink, 433.
- Ritchie, Rev. A. I., Extracts from Session Records of Tynninghame, relative to Battle of Philiphaugh, 98.
- Robertson, Alexander of Strowan, 283-4.
- Robin's Nest at Fairnalee, and its Tenants, 434, 474.
- Rolland of Rollandston, 483.
- Roman Lamp, 217; Coins, 122; Wall, 225-6.
- Rooks, Food of, 106; Tame, 102; Nests, 103; Queries on, 106.
- Rothbury Meeting, 24; Town, 25; Church, 25.
- Rottenrow and Rattonraw, 443, etc.
- Round-about-Tree, 434.
- Roxburgh, Notice of Stones, exhumed from the Site of, 289; Old Town of, 289, 290; Easter, *ibid*; Fair of St. James at, 292, 297, 487.
- Royalists of North Northumberland, temp. Charles I., 94, etc.
- Rubus Chamæmorus, 81.
- Ruff in Chirnside, Charter of, 207.
- Russell, Miss of Ashiesteel, on Sir Walter Scott's Connection with Ashiesteel, with Remarks on that Place, 436, etc.
- Russell Family of Ashiesteel, 425-427.
- Rutherford and Maxton, Lands of, 297.
- Rutherford of Fairnylee, 346; Dr John, Professor, 346.
- Ruthvens of Dunglass, 410.
- Ryall, Chapel of, 269.
- Salix, Species of, 269, etc.
- Salmo Eriox or Trutta; fontinalis, 218; Levenensis, 175.
- Salmon and Grilse, Sexes of, 112; Weights of Salmon, 113, 114.
- Saltcoats, castellated Manor-house of, 211.
- Sanderson, Mr James, 306.
- Saxifraga Hirculus, 533.
- Saxon Cross, 25, 250.
- Scott, John, Copy of a Communication between the Royalists of Northumberland and the Authorities of Berwick, 94; James Fitz James, Duke of Berwick, and the Town of Berwick, 280; Examination of Francis Tunstall, gent., at Berwick, 282.
- Scott, Sir Walter, at Clovenfords, 421; at Ashiesteel, 423-427; his Oak, 426; his father, mother, and grandmother, 346-7.
- Dr William, 268.
- Scottish Grandees in time of Edward I., 285-6.
- Scrapers, Flint, 167, 546.
- Scremerston, Lepidoptera, found at, 120.
- Sculptured Stones of Scotland, 234.
- Seal of the Burgh of Canongate, Edinburgh, 393; of the Priory of Coldstream, 516.
- Sea-Trout, Notice of a, 173.
- Selkirk Meeting, 12; Flowering Plants and Ferns of, 77; Forest, 285-6, 479; Native Birch of, 148; Physical Features, Geology, and Climate of the Shire of, 77, etc.
- Sepoy Revolt, 61-2.
- Service Tree, 5.
- Shaftoe, Arthur, vicar of Stamfordham, 265.
- Sharp, Major William, 301.
- Sir William of Dunglass, 410.
- Shaw, William, Lepidoptera at Eyemouth, 124, 323.
- Shawdon Woodhouse and Crawley, 244; House burnt, 253.
- Sheep, numbers of on the Borders anciently, 287-8.
- Shilbottle, Lord of, 214-5.
- Shirras' Road and Knowe, 423.
- Silver Firs, large, 227.
- Simonside, Bronze Weapons found at, 176-7.
- Simprin Church, Ruins of, 219.
- Simprin Parish, Berwickshire, Account of, 294, etc.; Name, 294; Owners, 294-7, 298-304; Village burnt, 298; Church, 294-5-8; 305, 311; Ministers, 305-310; Tombs, 311; Boston's Manse and Well at, 311; Barns of, 303, 304, 309.
- Simpson, Rev. F. R., Rainfall at North Sunderland in 1877, 380.
- Sinclairs of Longformacus and Stevenson, 337, 346.

- Singing of Birds in Autumn, 100.
Sinodendron cylindricum, 403.
 Slate-coloured Moles, 525.
 Smail, James, Zoological Notices, 99, etc.; On Caddonlee School and the Nest, 472.
 Smith, Sir Andrew, M.D., etc., Memoir of, 33; Bibliographical List of his Writings, 47.
 Smuggling, 256.
 Smyrna, Plague of Field Mice at, 465.
 Sorulesfeld, 483.
 South Shields, Fort of, 98.
 Spalding Club, 233.
Sphæria Robertsii, 23.
 Spanish Chestnut, Large, 227.
 Spartum of the Ancients, 390-1; 453.
 Spear-head of Flint, 167.
 — of Iron, 417.
Specularia hybrida, 402.
 Spence, Roger, Curate of Alnmouth, 252.
 Spindle-whorls, 440.
 Sprott, George, of Eyemouth, 207.
 Squirrels, Food and Habits, 189; Eating Fungi, 494; in Lauderdale, 527; during Winter, 528.
 St. Bey's or St. Anne's Chapel, Dunbar, 11.
 St. Boswells' Meeting, 226.
 St. James' Church, Roxburgh, 293.
 — Fair at Roxburgh, 290, 292, 487.
 St. Mary's Altar, Coldingham, 541.
 — Loch, 79.
 St. Michael's Church, Alnwick, 6.
 St. Waleric, old name of Alnmouth and Newbiggin, 237; in Picardy, 239; who he was, 239.
 St. Winifred's well, 369.
 Stags, 479.
 Stamfordham Church, on, 263, etc; Church, 263-4-6; Parsons, Rectors and Vicars of, 264-5; Townships in, 263, etc; Monuments, 267-8; Tower of, 268.
 Steel, one of the meanings of, 424.
 Stirling, A. B., On a Sea-Trout from Carham Ponds, 173.
 Stone Axe, 545.
 Stone Bullets of Mons Meg at Norham, 21; at Swinton House, 220.
 Stone and Flint Implements of Berwickshire and the Borders, 160, 543.
 Stone Celts and Implements, 11, 28, 163, 205, 418, 440, 441, 543, etc.
 Stone-Chat nesting in Rabbit Burrows, 191.
 Storms and Shipwrecks, 256-71.
 Stryvelyn, John de, 240, 286.
 Stuart, Dr Charles, on the Cultivation of *Linnæa borealis* and *Goodera repens*, 510.
 — Dr John, F. S. A. etc., Obituary Notice of, 232, etc.
 — Prince Charles Edward, Supposed Shield of, 9-11.
 Superalitaria, 540.
 Swan, Polish, Notice of, 511; Wild, 512, 529.
 Swinburne, John, of Black Heddon, 268.
 Swine family of Swinton, 219.
 Swinhoe, Gilbert, of Berrington and Chatton, 96-7.
 — James, of Chatton, 97.
 Swinton, Gift of to Coldingham, 540; Church, tomb of Alan de Swinton, and Dr W. Baird at, 219.
 Swinton House, 220, 351.
 Swinton, Little and Meikle, 330, 334, 336.
 Swinton, Archibald Campbell, LL.D.; Anniversary Address, 2; Notice of Dunse Castle Araucaria, 168; on the Swintons of that Ilk, 328, etc.
 Swinton of Swinton, Arnulf or Herulf, 328; Sir Alan de, 329; Sir Adam de, 329; Sir Alan, 2 and 3, 330; Sir Henry, 1 and 2, 330; Sir John, 330; Sir John, 332; Sir John, 334; John, 335; John, 336; Sir John, 337; Robert, 337; John, 338; Sir Alexander, Sheriff, 338; John, Judge Swinton, 340; Alexander, 344; Sir John, 345; John, Advocate, 349; John, Lord Swinton, 350; John, Sheriff, 351; John, 352; Robert Hepburne, of Swinton Bank, 352; John Edulfus of ditto, 352; John Edulf of ditto, 352.
 Swinton, Alexander, Lord Mersington, 338, 339.
 — Archibald, of Kimmerghame, and his Descendents, 350.
 — David, Parson of Cranshaw, 335.
 — Margaret, the "Aunt Margaret" of Scott, 347.

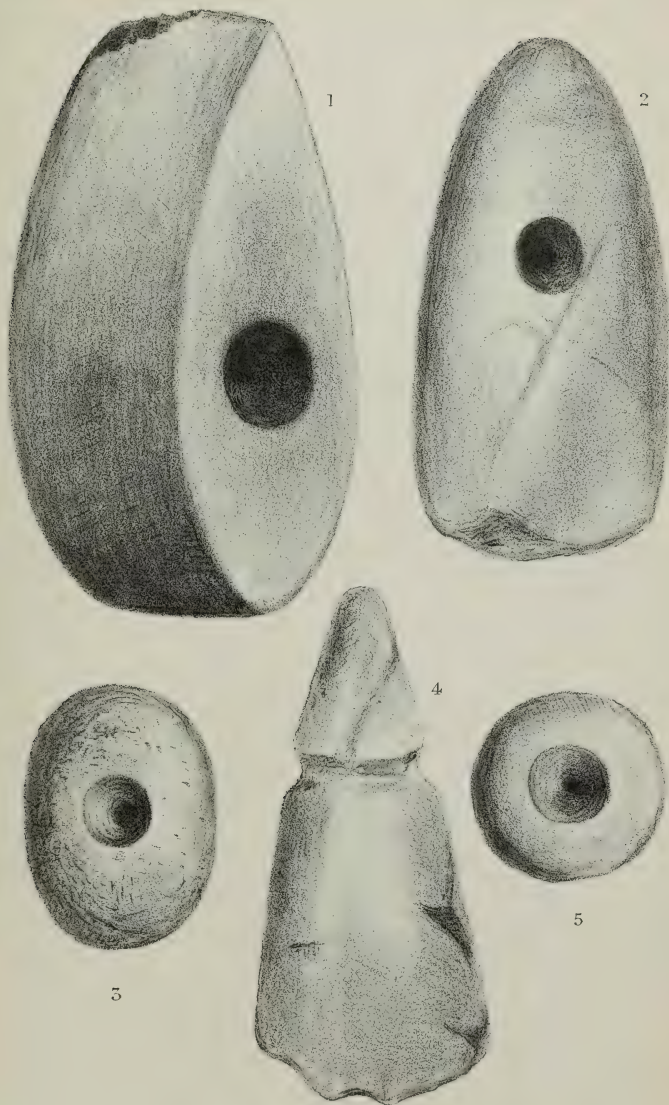
- Swinton, Mark, of Inverkeithing, 336.
 ——— Rev. John of Oxford, the Antiquary, 339, 340.
 ——— Robert in North Berwick, 346.
 ——— Swinton, Samuel, R.N., and his Descendants, now of Swinton, 350.
 Sword, Bronze, 176-7.
 Swynwood, 488.
 Symprinc or Sempring, Family of, 294-5.
- Tadpole Fish, 118.
 Tame Redbreast, 101.
 Tate, George, F.G.S., 4.
 Tate, George, F.G.S., An Account of Lesbury Parish, Northumberland, 238 (Alnmouth).
 Tate, Thomas, Occurrence of the Wood Lark in Northumberland, 192.
 Temple, Sir Richard, 62, 63.
 Testacea, North British, 73
 Teviotdale Farmers' Club, Report on Mice Plague, 469.
 Thorn, the Lonely, 424.
 Threburnford, Lepidoptera taken at, 318.
 Thrum at Rothbury, 26.
 Thweng, Barons, 481.
 Tombstones at Roxburgh, 290-3.
 Torwoodlee, 419.
 Torsonce, Pringle of, 277.
 Tosson, 25.
 Tours, Jeffray and John de, 297.
 Towels for Altars, 540.
 Trabroun, Barony of, 275.
 Traquair, Forest of, 285.
 Trees, Notable, 5, 15, 20, 30, 215, 220, 225, 227, 228, 426, 431, 432, 434.
 Trinly Knowes, 424.
 Tufted Duck, breeding at Yetholm Loch, 180, 521.
 Tunstall, Francis, Examination of, 282; the Yorkshire Tunstalls, 284.
 Turnbull, William, P., LL.D., Notice of, 71.
 Tweed Commissioners, Report of the Experimental Committee of, 1876, 1877, 1878, 169, 277, 490.
 Tweed, number of Days in the Fishing when above or below Summer Level, 113.
- Tweed Vinery at Clovenfords, 421.
 Twedemuth, 241.
 Tynemouth, 241.
 Tynninghame, Extract from Session Records of, 98.
- Udard of Swinton, the Sheriff, 328.
 Upsatlington, 288.
 Urn at Elliesheugh, 129, 546; between Belford and Hownamkirk, 131; at Humbleton Burn house, 395.
 Utricularia vulgaris, 227.
- Vaagmaer or Deal Fish, Notice of, 509.
 Veitch, Rev. Henry, of Swinton, 345.
 Velvet Scoter, on the Occurrence of in Summer of 1876, 75, 501.
 Verneuil, Battle of, 324.
 Vesey, Eustace de, 239, 481.
 ——— John de, 240, 255.
 ——— William de of Alnwick, 57, 58, 240.
 ——— Kildare, 67, 58.
- Vitality of Eggs, 104.
 Voles or Field Mice, 447, etc; 538.
- Wade's, General, Tree, 225.
 Waite, Robert, Rare Birds in the Vicinity of Dunse, 196, 532.
 Wallace's Putting Stone, 421; Trench, 424.
 Walwick Chesters, 225.
 Warkworth, Vill of, 241.
 Watch hill or Wallop, of Alnmouth, 243.
 Water Hemlock, Poisonous Effects of, 409.
 Water Shrew, 527.
 Water-Vole, Damage done to Trees by, 189; Black, variety of, 180; is it torpid in Winter? 184.
 Watson, Charles, Copy of Charter of Dunse, 91.
 Weasels, 458.
 Webster, George of Hallydown, 31.
 Wedderburn Castle, 206.
 ——— Lands, 288.
 ——— William de, 334.
- Weever, Great, 116.
 Wellingtonia gigantea, 20, 274.
 Wells, Sacred, Offerings at, 367-369.
 Weston, John de, Scottish Chamberlain, 296-7.

- Weston, Thomas de, 297.
 Whale, Greenland, 74.
 Whetstone, 116; Whettingstone at Wooler, 394.
 White Lady, 402.
 Whiterig in Eccles Parish, 306.
 White, Robert, the Historian and Poet, 406.
 White's Thrush, (*Turdus varius*), Notice of, 518.
 Whitton Tower, 27.
 Whytbank Tower, inscribed stone from, 433.
 William's Hope and Cross, 424, 440.
 Willows, on a Collection of, 269, etc.
 Wilson, Alexander, the American Ornithologist, 72.
 Wilsone, Mr George, 307.
 Wilson, John, Professor, his fishing resorts on the Borders, 421.
 Winter of 1878-9; Effects of, 498, 503, 509, 511-514, 529, 530.
 Wistaria, Extensive, 209.
 Wolf-Fish, 520.
 Wolf's Glen and Knowe, 424, 440.
 Wood, James, On British Cists found at Galashiels in 1878, 441.
 Wooden Hall, 250; Church, 254.
 Woodlark in Northumberland, 192.
 Wooler, 94; Meeting at, 394.
 Wordsworth, Wm. and Miss, their Notice of Clovenfords Inn, 422.
 ————'s Authority for the banner in the White Doe of Rylstone, 542.
 Wyndham family, 284.
 Yair Bridge, House and Garden, 432-3.
 Yarrow Apples, Birks, and Houms, 15.
 Yeavinger Bell and its Etymology, 401, etc.; Yeavinger Oaks, 401.
 Yule, Dr John, his Tombstone, 210.
 Zoological Notices, 99, 180, 189, 527.
 Zulu Country, 36-7.



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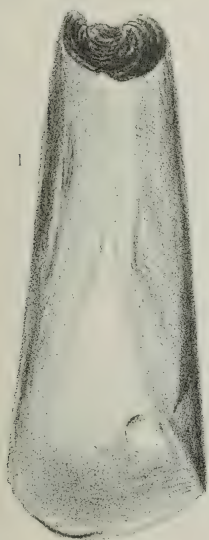
- PAGE 195, line 2, *for* Otis Tetrax, *read* Ardea minuta.
- „ 209, line 11. This is not a *tomb*, but a *canopied seat*. It is engraved in Billings' Baronial and Ecclesiastical Antiquities of Scotland.
- „ 285, line 18, *for* 4 stags, *read* 2 stags.
- „ 404, line 10, *for* Henry VI., *read* Henry IV.
- „ 425, line 2, *for*, in front of, *read* behind.
- „ 433, at foot of page, *for* Hinerarium, *read* Itinerarium.
- „ 434, line 19, *for* six, *read* three.
- „ 435, line 34, *for* Labour, *read* Lebour.
- „ 436, line 21, *omit* and.
- „ 438, line 37, *omit* and, and place it in the next line before, “the principal seats.”
- „ 472, *for* page 774, *read* 472.
- „ 489, line 33, *for* Papeday, *read* Papedy.
- „ 532, line 5, *for* cyanens, *read* cyaneus.



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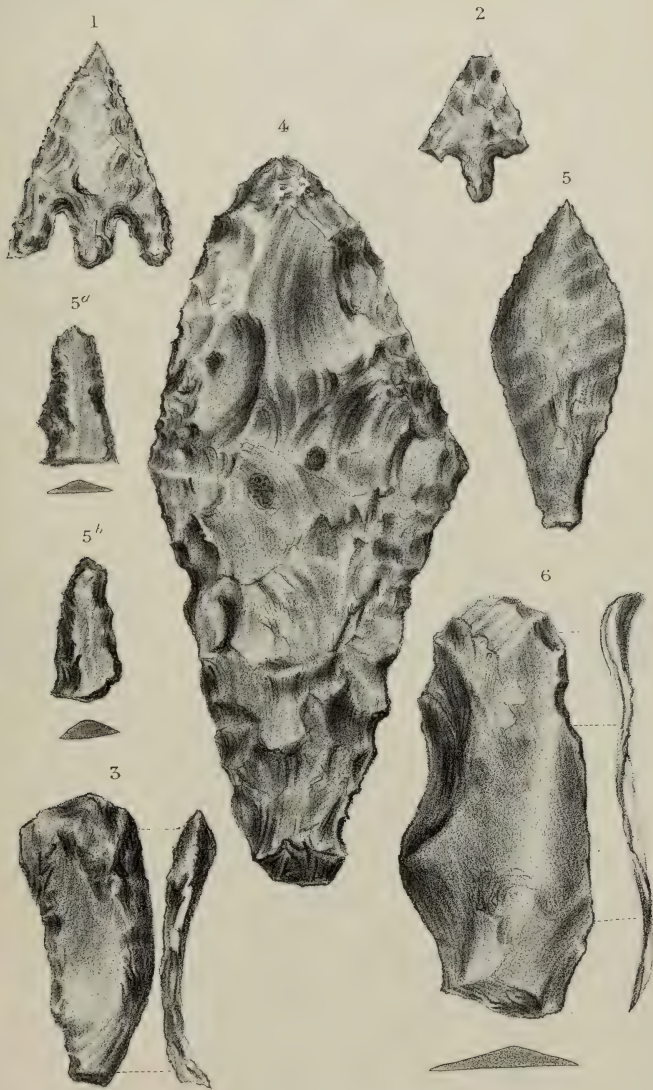
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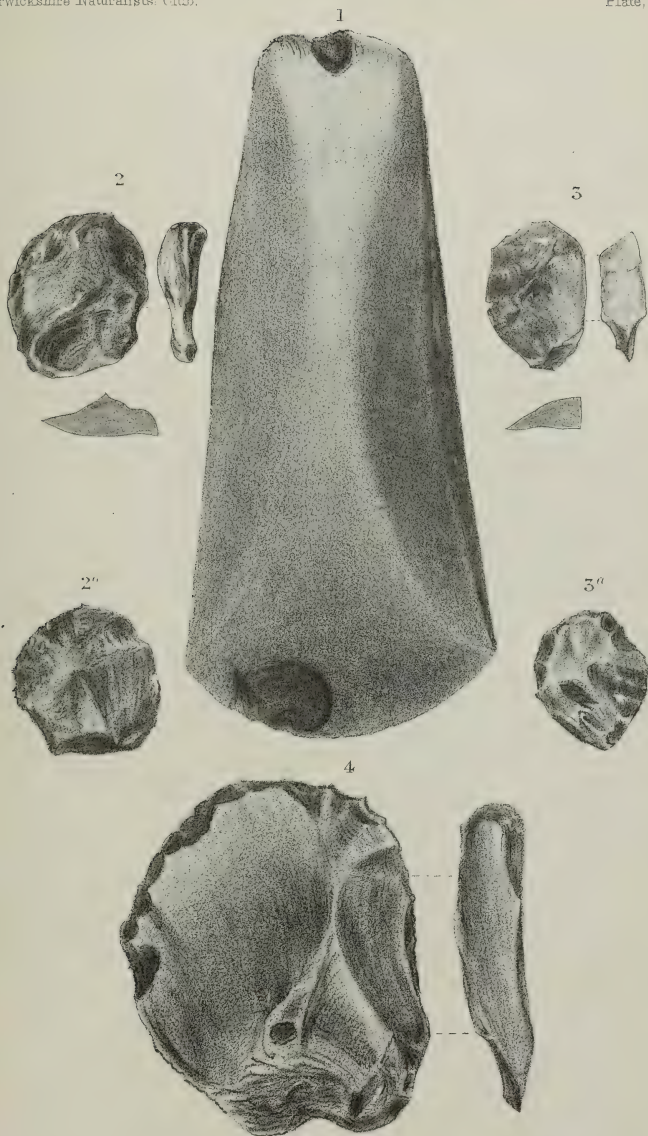




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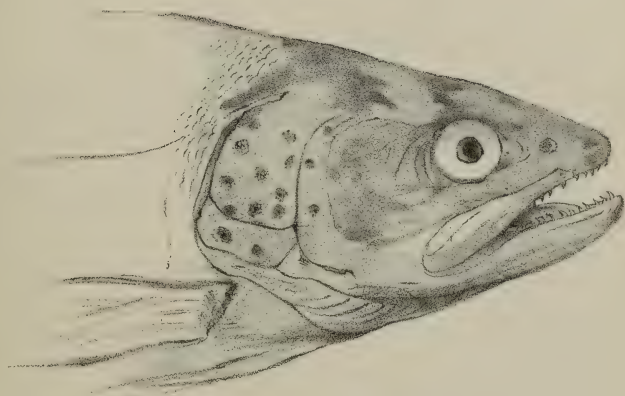
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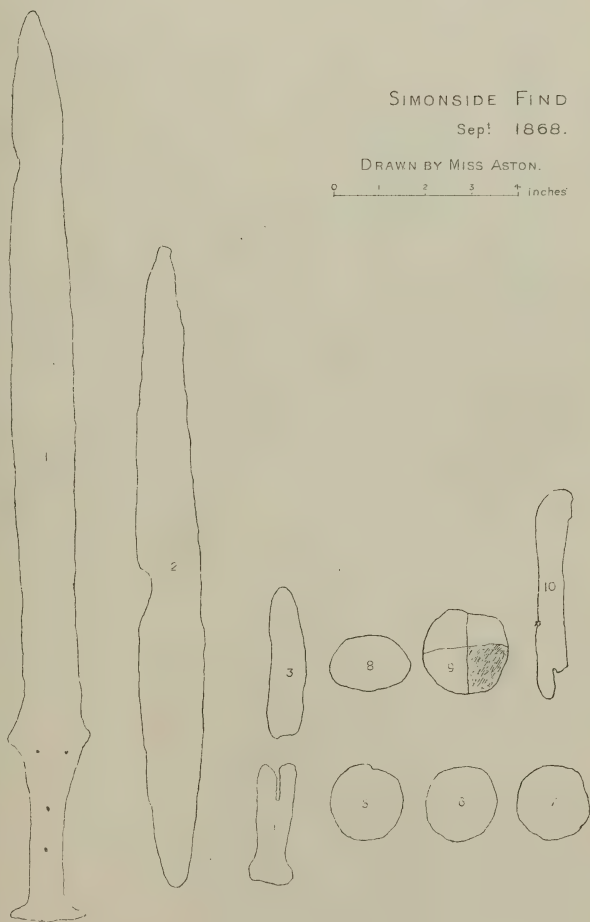


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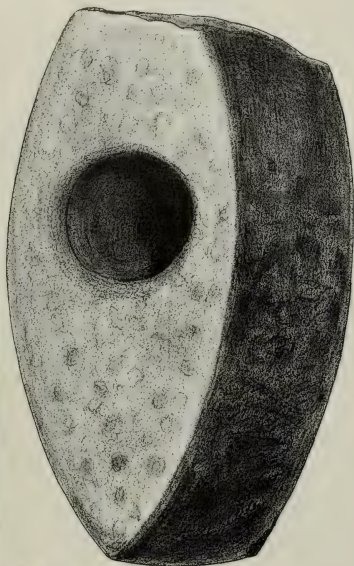
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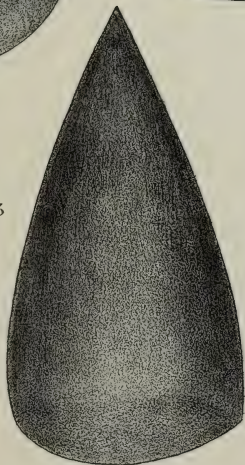




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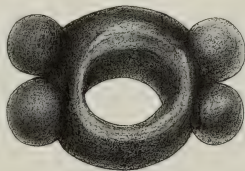
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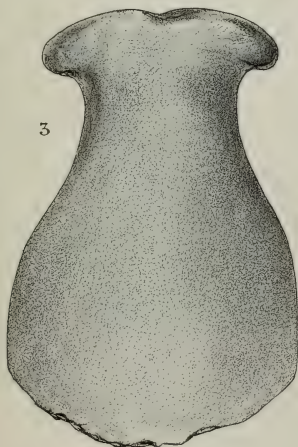
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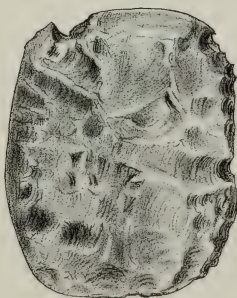
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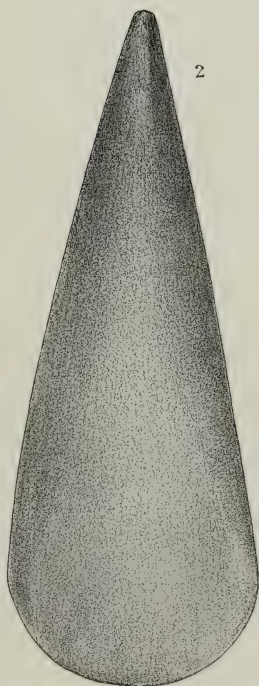
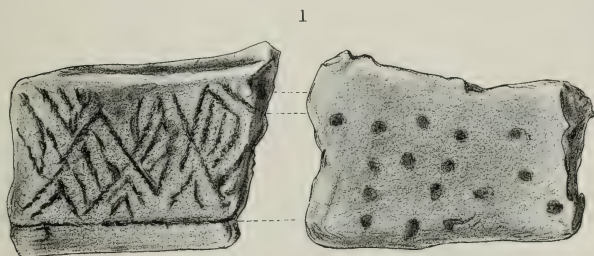
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Keith & Gibb, Aberdeen.

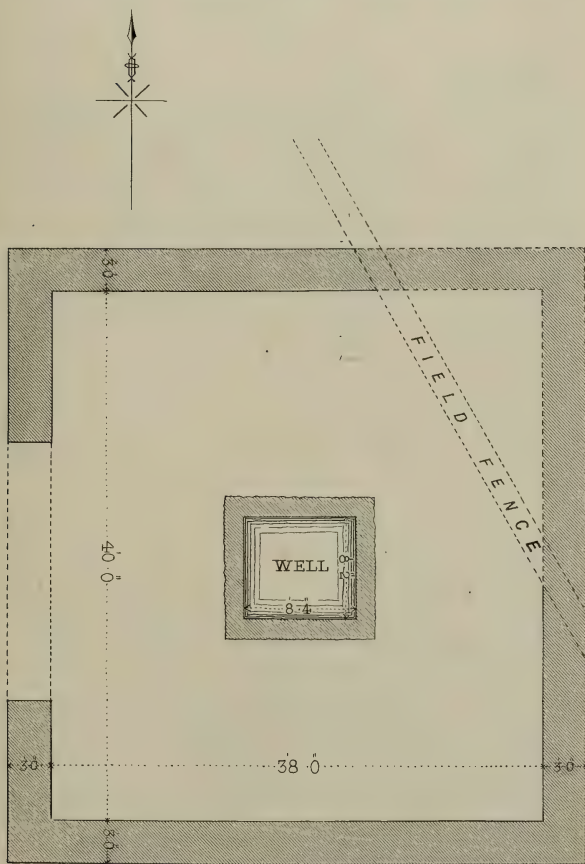
PART OF URN. AND STONE IMPLEMENTS.







GROUND PLAN OF THE TEMPLE OF CONVENTINA, AT PROCOLITIA



Scale of Feet.

